

INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
REASSESSMENT
FOR
~~LASALLE PARK~~/BECK'S LAKE SITE
SOUTH BEND, INDIANA
ST. JOSEPH COUNTY

U.S. EPA ID: IND980904379

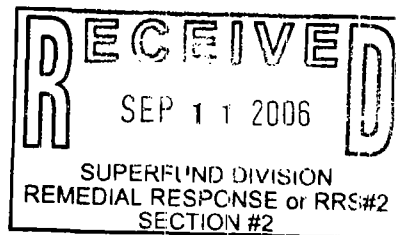
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for
LaSalle Park/Beck's Lake
Reassessment Inspection
South Bend, Indiana
St. Joseph County

U.S. EPA ID: IND980904379



Prepared By:

Mark Jaworski

Date:

8-31-06

Mark Jaworski, Project Manager
Site Investigation Section
Indiana Department of Environmental Management

Approved by:

Timothy Johnson

Date:

8-31-06

Timothy Johnson, Project Manager
Site Investigation Section
Indiana Department of Environmental Management

Approved By:

Gabriele Hauer

Date:

9-01-06

Gabriele Hauer, Chief
Site Investigation Section
Indiana Department of Environmental Management

Approved By:

Laura J. Ripley
EPA Site Assessment Manager

Date:


03/09/2007

NOTE REVISIONS TO THIS REPORT WERE
SUBMITTED ON MARCH 9, 2007 THEREFORE
THE APPROVAL DATE REFLECTS THE DATE
WHEN THE REPORT WAS APPROVED AND
ACCEPTED BY EPA.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

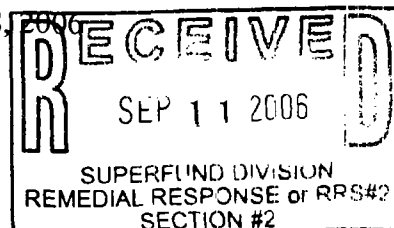
 *Mitchell E. Daniels, Jr.*
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

September 8, 2006

Ms. Laura Ripley, SR-6J
Site Assessment Section
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604



Dear Ms. Ripley:

Re: LaSalle Park/Becks Lake
South Bend, St. Joseph County
Site Summary Report/Reassessment
EPA ID: IND980904379

The current owner of LaSalle Park is the City of South Bend Department of Parks and Recreation. The park was acquired from the South Bend Redevelopment Commission in the 1960's.

According to the 1989 Screening Site Inspection Report, the LaSalle Park/Beck's Lake property was used as a dump during the 1950's. There are no records of licenses or permits for disposal activities. There is documentation that the site was previously used as an industrial waste landfill in the 1950's.

Potential concerns associated with the LaSalle Park/Beck's Lake property and surrounding areas include the presence of arsenic in surface soil samples. The Indiana Department of Environmental Management (IDEM) Brownfields Program investigation in October 2001 indicated levels of arsenic in the surface soil at the park between 5.7 and 20.9 parts per million (ppm) and in residential areas between 4.8 and 13.8 ppm

On June 16, 2003, Site Investigation staff of the IDEM conducted a reassessment of the LaSalle Park/Beck's Lake Park. A total of 22 surface soil samples were obtained from residential and public properties around the LaSalle Park/Beck's Lake site. Analytical results indicate the presence of arsenic in residential areas at levels between 1.9 ppm and 32.9 ppm. Arsenic was detected at 3.5 ppm in the background sample. Three (3) times background level (10.5 ppm) is the benchmark used for comparison of other samples. Seven (7) samples exceeded 10.5 ppm, ranging from 10.7 ppm to 32.9 ppm for arsenic.

Lead was detected in all samples (ranging from 20.7 ppm to 306 ppm). Three (3) samples were detected at a concentration higher than three times the highest background

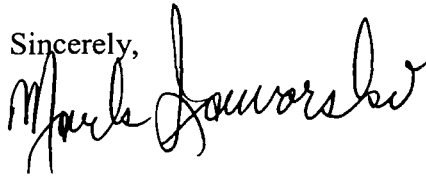
Mr. Laura Ripley
Page two

sample (181.5 ppm). Chromium was detected in all samples (ranging from 5.3 ppm to 152 ppm).

Two (2) samples, were detected at a concentration greater than three times the highest background sample (64.8 ppm). Chromium was detected (74.6 ppm and 152 ppm) in the two (2) samples listed above.

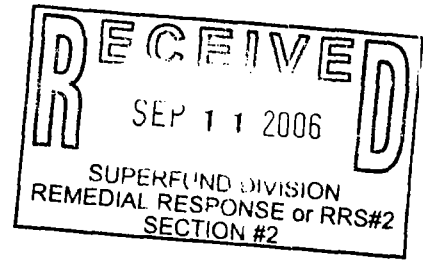
Should you have any questions regarding the contents of this correspondence, please contact me at (317) 233-2407.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Jaworski", written over the word "Sincerely,".

Mark Jaworski
Site Investigation Section
Office of Land Quality

MJ/sb



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

REASSESSMENT INSPECTION

FOR

LASALLE PARK/BECK'S LAKE

SOUTH BEND, INDIANA

ST. JOSEPH COUNTY

U.S. EPA ID: IND980904379

AUGUST 31, 2006

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SECTION I INTRODUCTION

The Indiana Department of Environmental Management (IDEM) Office of Land Quality (OLQ) Site Investigation Section, under a cooperative agreement (CA) with the United States Environmental Protection Agency (U.S. EPA), Region V Office, has been funded to perform Site Investigations (consisting of Preliminary Assessments (PA), Screening Site Inspections (SSI), and Expanded Site Inspections (ESI)), for certain sites listed in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). These assessments are conducted under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (aka Superfund) and the Superfund Amendments and Reauthorization Act of 1986. The purpose of the investigation is to obtain the data necessary to identify the highest priority sites posing threats to human health and/or the environment. Sites eligible for SSIs include those sites for which the Preliminary Assessment (PA) did not conclude that 'No Further Remedial Action Planned' (NFRAP), as reflected in CERCLIS. After a site has been NFRAP'd at the SSI phase, new information regarding the site may become available and may necessitate having the site reassessed. The primary objective of the site Reassessment (RA) are:

- to collect additional data, using the Hazard ranking System (HRS), required to make the determination of whether the site should be placed on the National Priorities List (NPL);
- to identify sites that may require removal actions to address immediate threats to human health and/or the environment.

The Site Investigation section was given approval by the U.S. EPA to conduct a Reassessment at the LaSalle Park/Beck's Lake Site located in St. Joseph County, Indiana

On June 16, 2003, IDEM conducted the Reassessment at the LaSalle Park/Beck's Lake Site. Analysis of the soil samples collected for this inspection indicated some excessive levels of arsenic. Information contained within this report will be used to evaluate this site to support a site decision regarding the need for further Superfund action including the possibility for Beck's Lake Site to be considered for inclusion on the National Priorities List (NPL) of hazardous waste sites.

SECTION II

SITE BACKGROUND

2.1 Introduction

This section includes information obtained about the LaSalle Park/Beck's Lake site from the IDEM files, site visits, and other various sources.

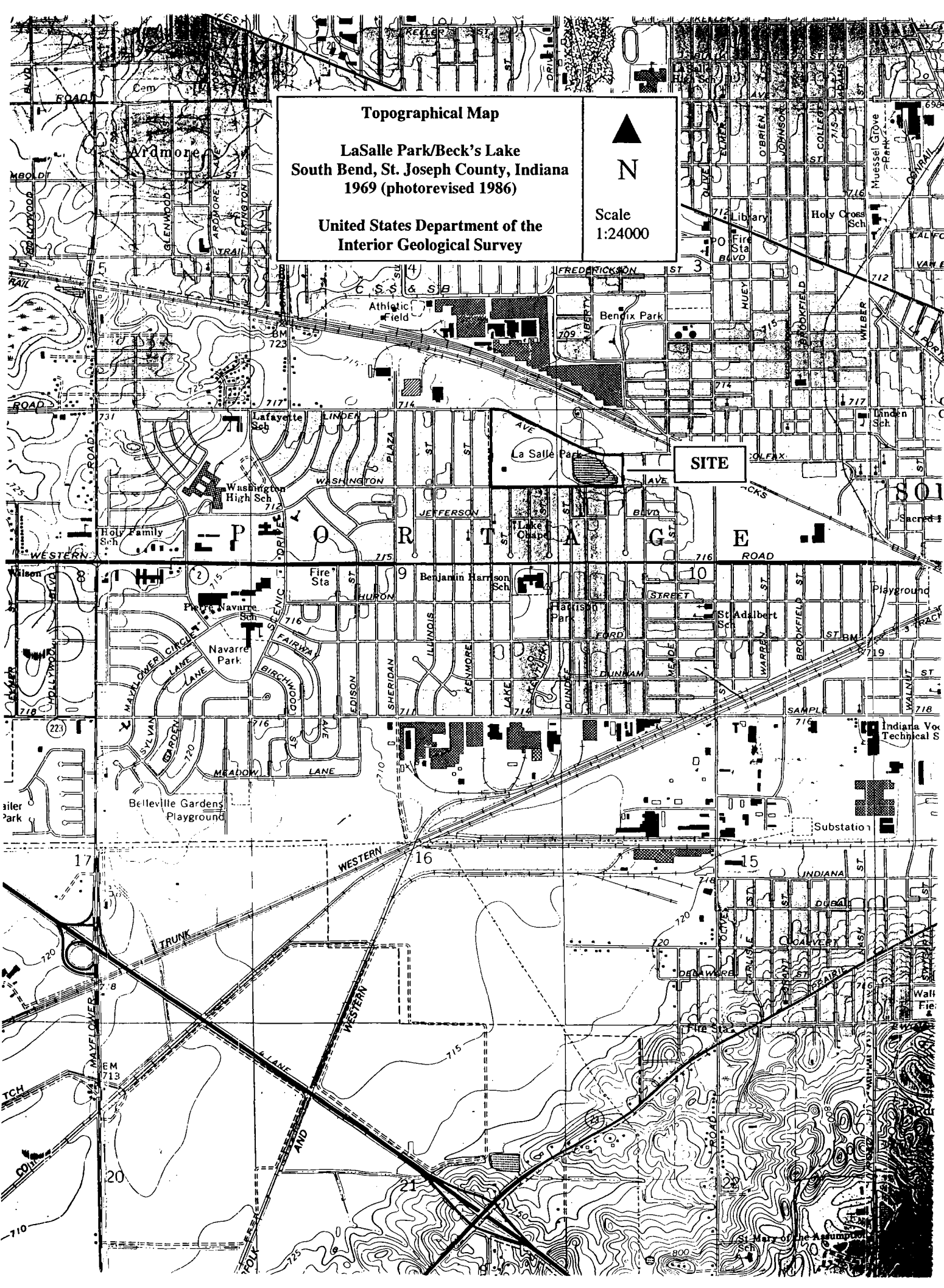
2.2 Site Description and Location

Refer to Site Location Map on Page 2-2. The site being investigated is the residential and commercial areas surrounding LaSalle Park/ Beck's Lake. The investigation stems from an Indiana Brownfields Environmental Assessment conducted by IDEM at LaSalle Park/Beck's Lake (November 14, 2002).

The site can be found on the U.S.G.S. South Bend West, Ind. Quadrangle Topographic Map in Sections 3, 4, 9 and 10, Township 37 North, Range 2 East. The site Latitude is N41° 40' 36" and the Longitude is W86° 17' 15". The LaSalle Park/Beck's Lake property is located at 3419 West Washington Street, South Bend, St. Joseph County, Indiana. The park is situated north of Washington Street, south of Linden Avenue, east of Falcon Street, and west of Kaley Street in Portage Township. LaSalle Park's location is the NE ¼ of the NE ¼ of Section 9 and the NW ¼ of the NW ¼ of Section 10, Township 37 North, Range 2 East.

The areas of investigation for this report, include the residential and commercial/ industrial areas surrounding the site. Refer to the Site Location Map on Page 2-2.

LaSalle Park consists of approximately 40 acres. A lake approximately eight (8) acres in area (Beck's Lake) and a man-made hill built during the construction of the park are



Topographical Map

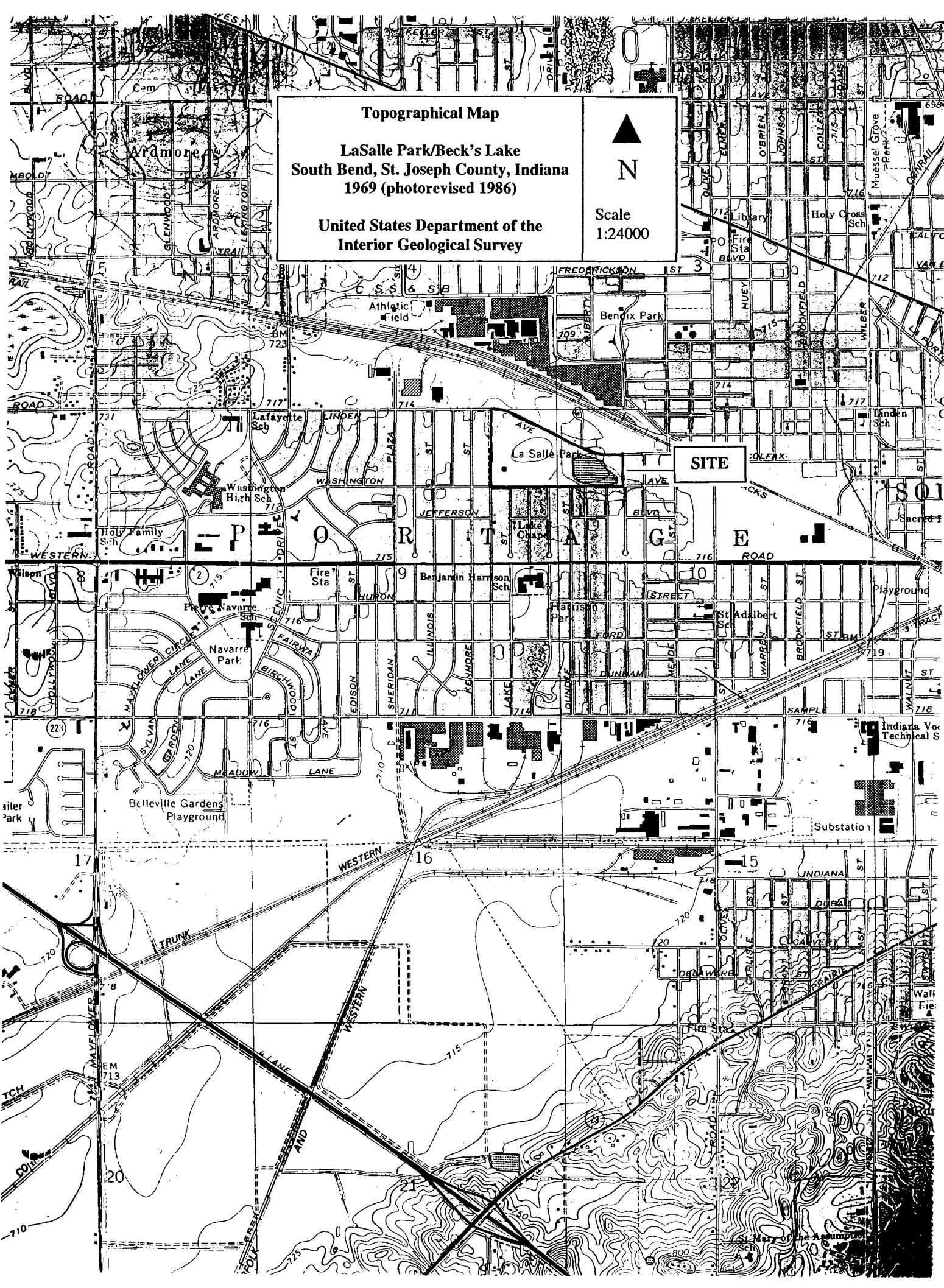
LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
1969 (photorevised 1986)

United States Department of the
Interior Geological Survey

Scale
1:24000



SITE



located on the eastern half of the site. Playground equipment, baseball fields, and a community center are located on the western half of the site. The western part of the subject property and the hill are well maintained; the lake is surrounded by wetland vegetation. There is some household trash, tires, etc., in and around the lake. A recreation facility (Charles J. Black, Jr. Recreation Center) with a short drive and parking area is located on the southwest part of LaSalle Park with access to Washington Street. The park also has a picnic shelter, tennis courts, basketball courts, volleyball courts, a baseball field and three (3) playground areas.

The areas surrounding the LaSalle Park/Beck's Lake property are primarily old single- and multi-family residential on typical residential-type side streets, with some commercial and light industrial properties nearby. Adjacent land to the north (across Linden Avenue) is wooded, followed by a quarry, followed by Conrail Railroad tracks. To the east is a light industrial facility (Prime Source Supply, Inc.) between LaSalle Park and Kaley Avenue. To the south is residential property. To the west/southwest is a large apartment complex followed by residential properties. It was observed that many residents south of the park have gardens in their yards. There was also a large garden to the west across Falcon Street. Streets in the area are maintained by the City of South Bend.

Other industrial facilities in the area include:

- the former Singer Manufacturing Company property (located approximately two (2) blocks to the east of LaSalle Park, between Western Avenue and the railroad tracks and between Walnut Street and Olive Street) and Honeywell International, Inc. (located to the north of LaSalle Park, just north of the railroad tracks).

Areas of concern as potential sources of contamination include:

- The former Singer Manufacturing Company located on the western portion of the triangular shaped property (north of Western Road, east of Olive Street.
- Walnut Street, and south of the railroad tracks). The Singer Manufacturing Company property has been partially redeveloped although there are still some vacant buildings left on the site. Current facilities operating on the property include a Wells Fargo Bank, Marycrest Singer/Hammes medical offices, Bill's Place Restaurant, ABC Supply Co. (roofing, windows and siding), RediFroz (Division of Roundy's) (vacant), Safety Kleen, and the Norman Perry Trophy Shop.
- Honeywell International, Inc. (formerly the Bendix Corporation, 1923-1983; the Allied Corporation, 1983-1985; and Allied Signal, Inc., 1985-1999). The Honeywell International, Inc. facilities to the north of LaSalle Park are still operating.

2.3 Site History

According to the St. Joseph County Auditor records, the current owner of LaSalle Park is the City of South Bend Department of Parks and Recreation. The park was acquired from the South Bend Redevelopment Commission in the 1960's. According to the 1989 Screening Site Inspection Report, prior to construction of the park, part of the property may have been used for housing. The St. Joseph County Assessor's Office has no records of previous owners.

According to the 1989 Screening Site Inspection Report, the LaSalle Park/Beck's Lake property was used as a dump during the 1950s. There are no records of licenses or permits for disposal activities. A file search has revealed no past violations at the property. There is documentation that the site was previously used as an industrial waste landfill in the 1950s. However, there is no evidence that this use was in violation of local, state or federal regulations at the time the dumping occurred. Though the 1989 Report indicates that fishing was uncommon during the 1980s, during the October 16, 2001, sampling event, at least four

(4) residents of the area stopped by and indicated that they often fished in the lake.

Additionally, at a neighborhood meeting many residents indicated that fishing was common.

The western end of the park has a recreation center with a parking lot, a picnic shelter, a baseball diamond, tennis courts, basketball courts, volleyball courts, and three (3) playground areas. The man-made hill was constructed from concrete debris found on-site during construction of the park. The hill is approximately 25 feet in height and is used for sledding during winter months.

The areas to the south, west and northeast of the park are primarily residential. There are some vacant lots on the south side of Washington Street that appear to have formerly been residential. The areas to the north and east are commercial/industrial (see previous Section 2.2).

The City of South Bend intends to continue using the property as a City Park. Vacant properties adjacent to the park may be developed as community gardens, as infill mixed housing and business development, or incorporated into adjoining residential properties.

Potential concerns associated with continued use of the LaSalle Park/Beck's Lake property and surrounding areas include the presence of arsenic in surface soil samples. The IDEM Brownfields Program investigation in October 2002 indicated levels of arsenic in the surface soil at the park between 5.7 and 20.9 parts per million (ppm) and in residential areas between 4.8 and 13.8 ppm .

SECTION III PROCEDURES, FIELD OBSERVATIONS, AND ANALYTICAL RESULTS

3.1 Introduction

This section outlines the procedures, observations, and analytical results of sampling at the LaSalle Park/Beck's Lake Site.

3.2 Site Representative Interview and Reconnaissance Inspection

As part of the Brownfields investigation, IDEM staff had visited the Site (June 13, 2001). Staff also met with and discussed the area with Mr. Anthony Dukes of the City of South Bend Department of Community and Economic Development during the 2001 sampling event. Mr. Dukes expressed concern about potential contamination at the park and adjacent properties. General site conditions were discussed at that time.

Another site visit was conducted at the time of the Site Reassessment sampling in 2003. The following observations were made:

- A) The city park and the man-made hill were well vegetated in grass.
- B) People were observed fishing in Beck's Lake.
- C) A dead goldfish was found floating along the east edge of the lake.
- D) A fence was present along the southern sector of the lake.

3.3 Sample Procedures and Analytical Results

The laboratory results from the 2005 sampling of the LaSalle Park/Beck's Lake site have been determined to be acceptable for use and meet the criteria contained in the Contract Laboratory Program (CLP). Any exceptions to the acceptance of this data will be identified in the QA/QC memorandum by the U.S. EPA chemists. (Refer to Appendix B)

3.3.1 Soil Samples

Soil Samples were collected by IDEM at locations selected during the reconnaissance inspection to determine the extent of potential contamination. On June 16, 2003, a total of

21 surface soil samples (including one background sample), plus one duplicate sample, were obtained. The soil samples were identified as ME1MB0 through ME1MC0 and ME1MC2 through ME1MD2. The Soil Sample Location and Comments Table, Table 1 on page 3-3 depicts the sample number, location, and any comments pertaining to each sample.

Soil samples were obtained using plastic disposable scoops. The soils were homogenized in a stainless steel bowl with the plastic scoop. The homogenized material in the bowl was directly transferred into the sample jar using the plastic scoop. Latex surgical gloves were worn and discarded between the collection of each sample. Refer to the Soil Sample Location Map, Figure 1, on page 3-4 for the location of each soil sample.

3.4 Summary Tables

The laboratory results from the sampling of the LaSalle Park/Beck's Lake Site have been determined to be acceptable for use and meet the criteria contained in the Contract Laboratory Program (CLP). All samples were analyzed for metals. No other contaminants were analyzed because previous investigations (Brownfield Assessment) indicated that only metals were of concern .

A Key Findings List indicating concentrations of metals detected three times above background can be found on page 4-8. Any exceptions to the acceptance of this data will be identified in the QA/QC memorandum by the U.S. EPA chemists. Refer to Appendix B for complete chemical analysis data provided by the laboratory.

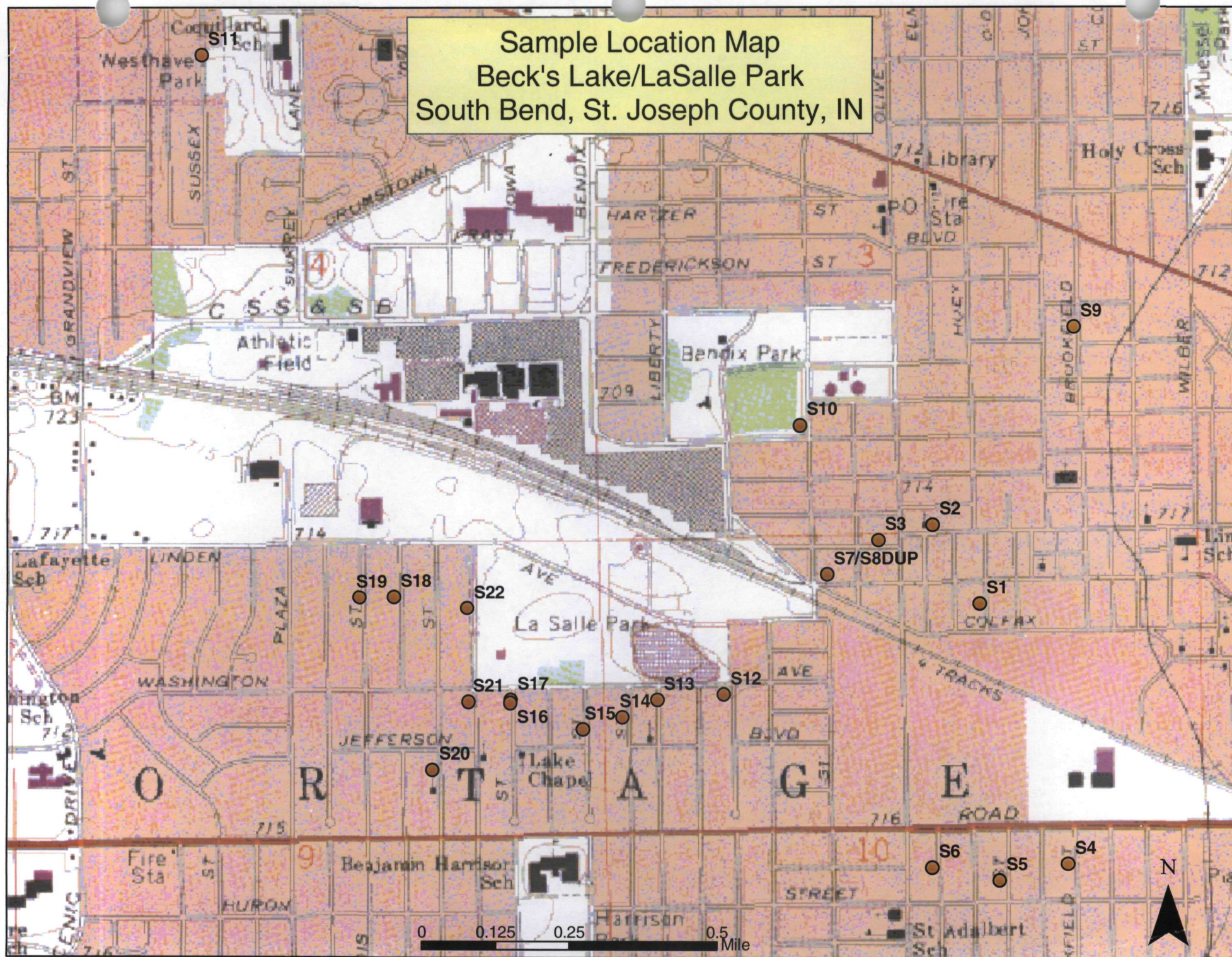
Table 1

Surface Soil Sample Location and Comments

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
June 16, 2003

Sample ID #	EPA CLP #	Time	Address	Comments
S1	ME1MB0	10:55 AM	116 North Huey	Soil obtained form top 6 inches
S2	ME1MB1	11:30 AM	222 Linden Avenue	Soil obtained form top 6 inches
S3	ME1MB2	11:45 AM	2415 lawton Street	Soil obtained form top 6 inches
S4	ME1MB3	12:15 PM	435 South Brookfield	Soil obtained form top 6 inches
S5	ME1MB4	12:30 PM	445 Warren	Soil obtained form top 6 inches
S6	ME1MB5	12:55 PM	433 South Phillips	Soil obtained form top 6 inches
S7	ME1MB6	2:30 PM	2517 West Orange Street	Soil obtained form top 6 inches
S8	ME1MB7	2:30 PM	2517 West Orange Street	Soil obtained form top 6 inches, Duplicate of S7
S9	ME1MB8	3:05 PM	706 Brookfield	Soil obtained form top 6 inches
S10	ME1MB9	3:25 PM	SE corner of Bendix Park	Soil obtained form top 6 inches, 20 ft. south of path; background
S11	ME1MC0	3:45 PM	Westhaven Park (Sussex Ave.) west of Coquillard School	Soil obtained form top 6 inches, Across from 1226 Sussex;
S12	ME1MC2	11:30 AM	109 Bendix Drive	Soil obtained form top 6 inches
S13	ME1MC3	11:40 AM	126 South Camden Street	Soil obtained form top 6 inches
S14	ME1MC4	12:00 PM	138 South Dundee	Soil obtained form top 6 inches
S15	ME1MC5	12:20 PM	128 South Kentucky	Soil obtained form top 6 inches
S16	ME1MC6	12:55 PM	119 South Lake Street	Soil obtained form top 6 inches
S17	ME1MC7	1:00 PM	114 South Lake Street	Soil obtained form top 6 inches
S18	ME1MC8	2:40 PM	217 North Wellington	Soil obtained form top 6 inches
S19	ME1MC9	2:55 PM	218 North Illinois	Soil obtained form top 6 inches
S20	ME1MD0	3:15 PM	217 Kenmore	Soil obtained form top 6 inches
S21	ME1MD1	3:35 PM	102 S Falcon (LaSalle Park Homes, near Unit 111)	Soil obtained form top 6 inches
S22	ME1MD2	3:40 PM	102 S Falcon (LaSalle Park Homes, near Unit 161)	Soil obtained form top 6 inches, MS/MSD

Sample Location Map
Beck's Lake/LaSalle Park
South Bend, St. Joseph County, IN



0 0.125 0.25 0.5 Mile

SECTION IV DISCUSSION OF MIGRATION PATHWAYS

4.1 Introduction

Potential migration pathways for contaminants migrating from the LaSalle Park/Beck's Lake Site are discussed in this section. Potential contaminant migration through groundwater, surface water (including Drinking Water Threat, Human Food Chain Threat, and Environmental Threat), soil exposure, and air exposure are addressed.

4.2 Groundwater Pathway

According to the Hydrogeologic Atlas of Aquifers in Indiana, the LaSalle Park/Beck's Lake site is located in the Kankakee Outwash and Lacustrine Plain within the St. Joseph River Basin. The topography of the basin is variable. Much of the Kankakee Outwash and Lacustrine Plain area is a poorly drained, level plain covered by fine-grained alluvium and underlain by thick outwash sand and gravel.

Four thousand feet of sandstones, siltstones, shales, limestones, and dolomites of Cambrian, Ordovician, Silurian and Devonian ages overlie Precambrian igneous and metamorphic basement rocks in the St. Joseph River Basin. Paleozoic shale and limestone are present at the bedrock surface throughout the St. Joseph River Basin in Indiana. A gently rolling bedrock surface is interspersed with a few entrenched, preglacial valleys. Bedrock is overlain by thick glacial drift throughout the basin.

The Ellsworth Shale of Late Devonian and Early Mississippian age overlies the Antrim Shale, and is present at the bedrock surface in the western part of the basin. The lower part of the formation consists of alternating layers of gray-green shale and brownish-black shale.

The upper part is a grayish-green shale that contains limestone and dolomite lenses. The Ellsworth Shale ranges in thickness from less than 40 feet to greater than 200 feet.

The St. Joseph River Basin is covered by thick, unconsolidated glacial deposits. Although the thickness of the drift in this basin ranges from 100 feet to 500 feet, thicknesses of 200 feet to 400 feet are typical. The sand and gravel units within the drift are the major aquifers of the basin.

The St. Joseph River Basin is an area of highly variable and complex glacial deposits. These deposits are variable in extent and thickness and are widespread over the entire area. Buried preglacial bedrock valleys, where they are filled with sand and gravel, are small but significant aquifers along the Indiana-Michigan State line. In the St. Joseph River Basin, groundwater flow in the unconsolidated aquifers is generally toward the St. Joseph River and its tributaries.

The primary unconsolidated aquifers in the South Bend area are the surficial sand and gravel aquifers. These aquifers consist mostly of outwash, outwash fan deposits, isolated hills and ridges of ice-contact stratified drift, and Holocene alluvium. Thicknesses of surficial sand and gravel aquifers range from a few feet to 160 feet. Precipitation is the principal source of recharge to the surficial sand and gravel aquifers. There are several potential bedrock aquifers in the St. Joseph River Basin. However, in over half of the area the potential bedrock aquifers are more than 300 feet below the land surface. Therefore, aquifers in the unconsolidated drift are more accessible, as well as adequate for all uses.

The potential for contaminants to migrate is based on past waste disposal practices and the permeability of the soil. According to the Soil Survey of St. Joseph County, Indiana (1977), soil at the site is of the Houghton-Adrian-Palms association, which is a deep,

depressional and nearly level, very poorly drained, organic soil on lake plains, outwash plains, and till plains. Specifically, four types of soil series make up the site: Gilford Sandy Loam (Gf), Houghton Muck, drained (Ho), Maumee mucky loamy fine sand (Mg) and Made land (Ma).

The northwest corner and a small area along the southern edge of LaSalle Park are comprised of the Gilford Sandy Loam soil. The Gilford series consists of deep, very poorly drained, nearly level and depressional soils on outwash plains. These soils are mainly on broad flats and along major streams. They formed in sandy material that was deposited as glacial outwash, lacustrine sediment, or stream alluvium. In a representative profile, the surface layer is sandy loam about 14 inches thick. It is black in the upper part and very dark gray in the lower part. The subsoil is 24 inches thick. It is mottled, gray, friable sandy loam in the upper 6 inches; mottled, gray, firm heavy sandy loam in the next 12 inches; and mottled, gray, very friable loamy sand in the lower 6 inches. The underlying material is gray sand that extends to a depth of 60 inches. Gilford soils have moderately rapid permeability and a moderate available water capacity. The organic-matter content is high in the surface layer. Runoff is very slow or ponded.

The southwest corner of the park is comprised of the Maumee mucky loamy fine sand soil. The Maumee series consists of deep, very poorly drained, nearly level and depressional soils on outwash plains. These soils are mainly on low depressional flats and along stream channels. They formed in sandy glacial outwash or stream alluvium. In a representative profile, the surface layer is loamy fine sand about 14 inches thick. It is dark gray in the upper part and very dark grayish brown in the lower part. The underlying

material is dark-gray, friable fine sand in the upper 14 inches; light brownish-gray, friable fine sand in the next 4 inches; dark grayish-brown, friable sand in the next 16 inches; and gray, loose sand to a depth of 65 inches. Maumee soils have rapid permeability and a low available water capacity. The organic-matter content is high in the surface layer. Runoff is very slow or ponded.

The central part of the park is Made Land. Made Land consists of areas that are filled with cinders, slag, or a combination of these, smoothed over, and covered with soil material. Depending on the material used as fill, some areas are suitable for pasture or wildlife habitat and others are suitable for recreation facilities or building sites.

The land surrounding Beck's Lake is made up of Houghton muck, drained soil. This soil consists of deep, very poorly drained, organic soils that are nearly level or depressional. These soils are mainly on the broad Kankakee muck flats and in depressions on till plains. They formed in mixed organic material on lake plains, outwash plains, and till plains. In a representative profile, the surface layer is black muck about 9 inches thick. The layer below that is dark reddish-brown, friable muck 38 inches thick. The underlying material is gray medium and fine sand that extends to a depth of 60 inches. Houghton soils have rapid permeability and a high available water capacity. The organic-matter content is very high in the upper 54 inches. Runoff is very slow or ponded.

The City of South Bend is supplied with municipal drinking water from groundwater wells. Groundwater at LaSalle Park is presumed to flow in a northeasterly direction towards the St. Joseph River. The nearest municipal wells are located approximately three miles to the east-northeast of the site. A review of South Bend's municipal drinking water analysis

that had been obtained from IDEM's Drinking Water Branch, indicated no significant detections of metals. Based on conversations with local water utility officials, there are no known residential water wells in the vicinity of LaSalle Park/Beck's Lake. There does not appear to be any concerns regarding the groundwater pathway. No groundwater samples were taken because there were no residential wells in the vicinity of Beck's Lake Site, the nearest municipal wells indicated no significant detections of metals, and surface soil was considered to be the primary pathway of concern. Ag Ripley
03/09/2007

4.3 Surface Water Pathway

Because this is an urban area, the natural drainage patterns have been altered. Surface water diversions such as storm sewers and ditches may redirect some of the runoff from the site to other locations. Other than Beck's Lake within LaSalle Park, the nearest surface water body is the St. Joseph River, which enters South Bend flowing west, then turns to the north and flows into Michigan. The drainage area of the St. Joseph River is 1,800 square miles in Indiana and 4,725 square miles in Indiana and Michigan combined. The nearest U.S. Geological Survey (U.S.G.S.) streamflow-gaging station (USGS 041010000) for the St. Joseph River is located in Elkhart (approximately 15 miles east of South Bend). The station has been in operation since 1948. The average flow of the St. Joseph River at this station is 3,262.5 cubic feet per second (cfs), with annual means ranging from 1,298 cfs to 5,397 cfs, and monthly means ranging from 1,881 cfs (September) to 5,117 cfs (April). No surface water samples were taken from the St. Joseph River.

4.3.1 Drinking Water Threat

The City of South Bend supplies water to approximately 113,000 people in the city as well as some residents outside the city limits. The city draws its water from 31 groundwater wells located in nine (9) separate well fields. There are no surface water intakes in the City of South Bend. The LaSalle Park/Beck's Lake Site does not lie within the City of South Bend Wellhead Protection Area per the city's Wellhead Protection Plan and would not impact the city's drinking water supply.

4.3.2 Human Food Chain Threat

Beck's Lake is located in LaSalle Park and is considered a fishery. Soil and sediment samples obtained from the site during the Brownfield Environmental Assessment that was conducted in 2001, revealed no contaminants of concern to fish in Beck's Lake. The Indiana Fish Consumption Advisory, published by the Indiana Department of Health, IDEM, and the Indiana Department of Natural Resources, does not list Beck's Lake as an impacted fishery. There does not appear to be any significant issues regarding the human food chain.

4.3.3 Environmental Threat

The Indiana Department of Natural Resources/Division of Nature Preserves – Heritage Program (IDNR/DNP-HP) documents sensitive environments and/or endangered or threatened species within the State of Indiana. According to the DNR, the following endangered species have been documented within one mile of the project site:

The state threatened plant Lathyrus venosus, smooth veiny pea, was documented in Section 3, Township 37 North, Range 2 East in 1929.

No other endangered, threatened, or rare species were identified for the area. No

significant concentrations of metals were detected on site that could impact any known endangered species. There does not appear to be any significant issues regarding the environmental threat.

4.4 Soil Exposure Pathway

Soil exposure is considered the most likely source of potential exposure at the LaSalle Park/Beck's Lake Site. Several surface soil samples were taken to determine the nature and extent of arsenic-contaminated soil. A total of 22 surface soil samples were obtained from residential and public properties around the LaSalle Park/Beck's Lake site. Refer to the Soil Sample Location Table on page 3-3. Analytical results indicate the presence of arsenic in residential areas at levels between 1.9 ppm and 32.9 ppm. Sample S11 was a background sample taken at a park several blocks north/northwest of the site. This sample had the same color and consistency as the rest of the samples. Arsenic was detected at 3.5 ppm in the background sample. Three (3) times background level (10.5 ppm) is the benchmark used for comparison of other samples. Seven (7) samples exceeded 10.5 ppm, ranging from 10.7 ppm to 32.9 ppm for arsenic.

Lead was detected in all samples (ranging from 20.7 ppm to 306 ppm). Three (3) samples were detected at a concentration higher than three times the highest background sample (181.5 ppm). Chromium was detected in all samples (ranging from 5.3 ppm to 152 ppm). Two (2) samples, S2 and S19, contained Chromium at a concentration greater than three times the highest background sample (64.8 ppm). Chromium was detected (74.6 ppm and 152 ppm) in S2 and S19 respectively.

The Key Findings List on page 4-10 lists all elevated concentrations of contaminants in residential soils that were found to be greater than three times background levels. Sample

results for all samples obtained can be found in Appendix B.

4.5 Air Pathway

No air samples were taken. No odors were observed during this inspection when collecting soil or sediment samples. Presently, there are no reports of adverse health effects resulting from the migration of hazardous substances through the air at this site. There does not appear to be a potential risk to nearby residents from the air pathway.

Table 2

**Background Level of
Contaminants of Concern
Table Shows Three (3) Times Background Table**

**LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
June 16, 2003**

Sample S11
(all results are in mg/kg)

Contaminant	Level	Three times (3X) Background Level
Aluminum	6680 mg/kg	20040 mg/kg
Antimony	10.9 mg/kg	32.7 mg/kg
Arsenic	3.5 mg/kg	10.5 mg/kg
Barium	92.1 mg/kg	276.3 mg/kg
Beryllium	0.44 mg/kg	1.32 mg/kg
Cadmium	0.79 mg/kg	2.37 mg/kg
Calcium	2010 mg/kg	6030 mg/kg
Chromium	21.6 mg/kg	64.8 mg/kg
Cobalt	4.6 mg/kg	13.8 mg/kg
Copper	10.8 mg/kg	32.4 mg/kg
Iron	8450 mg/kg	25350 mg/kg
Lead	22.0 mg/kg	66 mg/kg
Magnesium	1370 mg/kg	4110 mg/kg
Manganese	480 mg/kg	1440 mg/kg
Mercury	0.060 mg/kg	0.18 mg/kg
Nickel	7.4 mg/kg	22.2 mg/kg
Potassium	637 mg/kg	1911 mg/kg
Selenium	6.4 mg/kg	19.2 mg/kg
Silver	1.8 mg/kg	5.4 mg/kg
Sodium	38.7 mg/kg	116.1 mg/kg
Thallium	4.5 mg/kg	13.5 mg/kg
Vanadium	14.5 mg/kg	43.5 mg/kg
Zinc	75.2 mg/kg	225.6 mg/kg

ppm - parts per million

Table 2

Key Findings List - Metals

LaSalle Park/Beck's Lake
South Bend, St. Joseph County, Indiana
June 16, 2003

Sample ID #	EPA CLIP #	Contaminant	Level	Three times (3X) Background Level
S2	ME1MB1	Chromium	74.6 ppm	64.8 ppm
S4	ME1MB3	Lead	248 ppm	181.5 ppm
S6	ME1MB5	Lead	306 ppm	181.5 ppm
S9	ME1MB8	Arsenic	10.7 ppm	10.5 ppm
		Lead	238 ppm	181.5 ppm
S15	ME1MC5	Arsenic	26.2 ppm	10.5 ppm
S16	ME1MC6	Arsenic	13 ppm	10.5 ppm
S17	ME1MC7	Arsenic	24.7 ppm	10.5 ppm
S19	ME1MC9	Arsenic	32.9 ppm	10.5 ppm
		Chromium	152 ppm	64.8 ppm
S21	ME1MD1	Arsenic	11.7 ppm	10.5 ppm
S22	ME1MD2	Arsenic	12 ppm	10.5 ppm

ppm - parts per million

APPENDIX A

1

Sampling Photographs

Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB0 (S1)
Date: June 16, 2003
Time: 10:55 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
116 N. Huey Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB0 (S1)
Date: June 16, 2003
Time: 10:55 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
116 N. Huey Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB1 (S2)
Date: June 16, 2001
Time: 11:30 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2227 Linden Ave.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB1 (S2)
Date: June 16, 2001
Time: 11:30 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2227 Linden Ave.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB2 (S3)
Date: June 16, 2003
Time: 11:45 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2415 Lawton Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB2 (S3)
Date: June 16, 2003
Time: 11:45 AM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2415 Lawton Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB3 (S4)
Date: June 16, 2001
Time: 12:15 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
435 S. Brookfield.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB3 (S4)
Date: June 16, 2001
Time: 12:15 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
435 S. Brookfield.



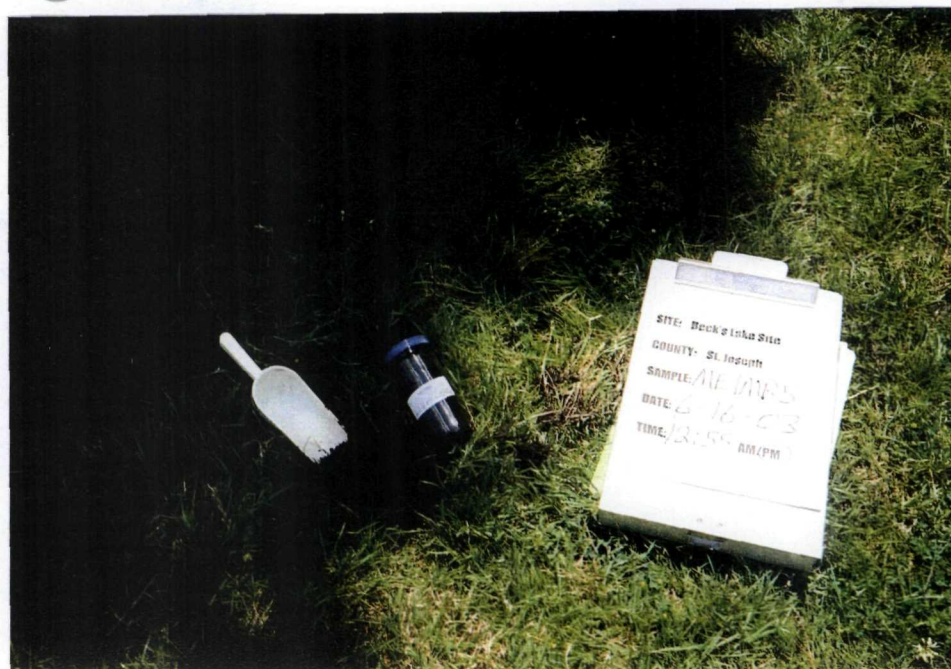
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB4 (S5)
Date: June 16, 2003
Time: 12:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
445 Warren Street.



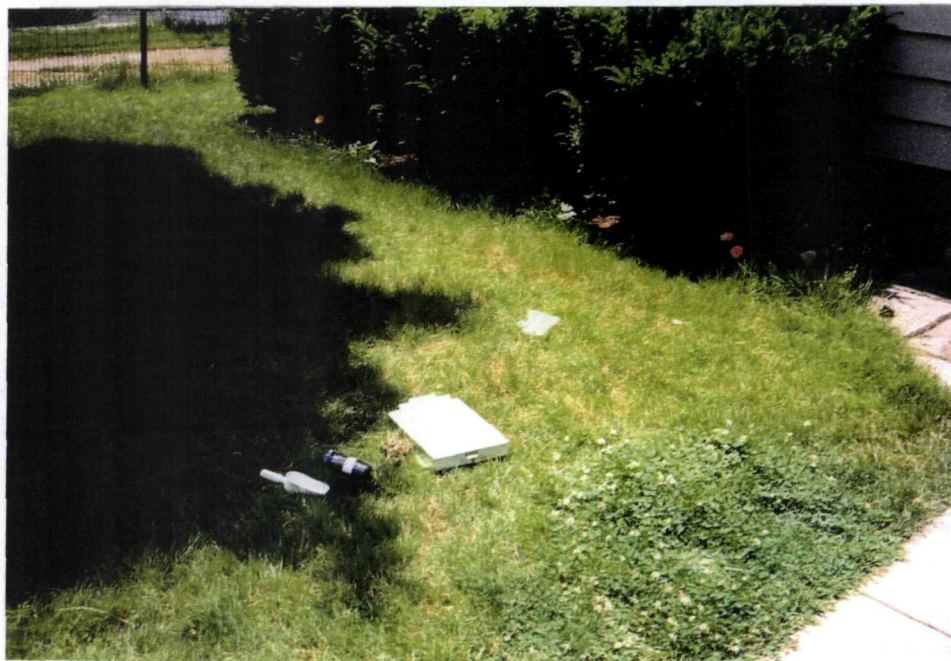
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB4 (S5)
Date: June 16, 2003
Time: 12:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
445 Warren Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB5 (S6)
Date: June 16, 2001
Time: 12:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
433 South Phillips.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB5 (S6)
Date: June 16, 2001
Time: 12:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
433 South Phillips.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB6 (S7)
Date: June 16, 2003
Time: 2:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2517 West Orange Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB6 (S7)
Date: June 16, 2003
Time: 2:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2517 West Orange Street.



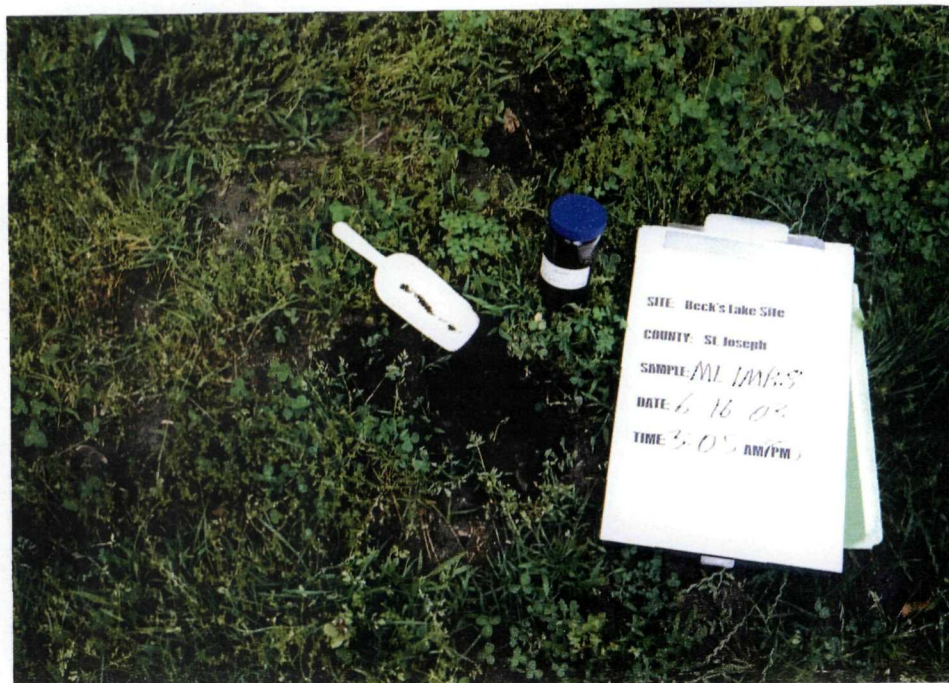
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB7 (S8)
Date: June 16, 2001
Time: 2:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2517 West Orange Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB7 (S8)
Date: June 16, 2001
Time: 2:30 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
2517 West Orange Street.



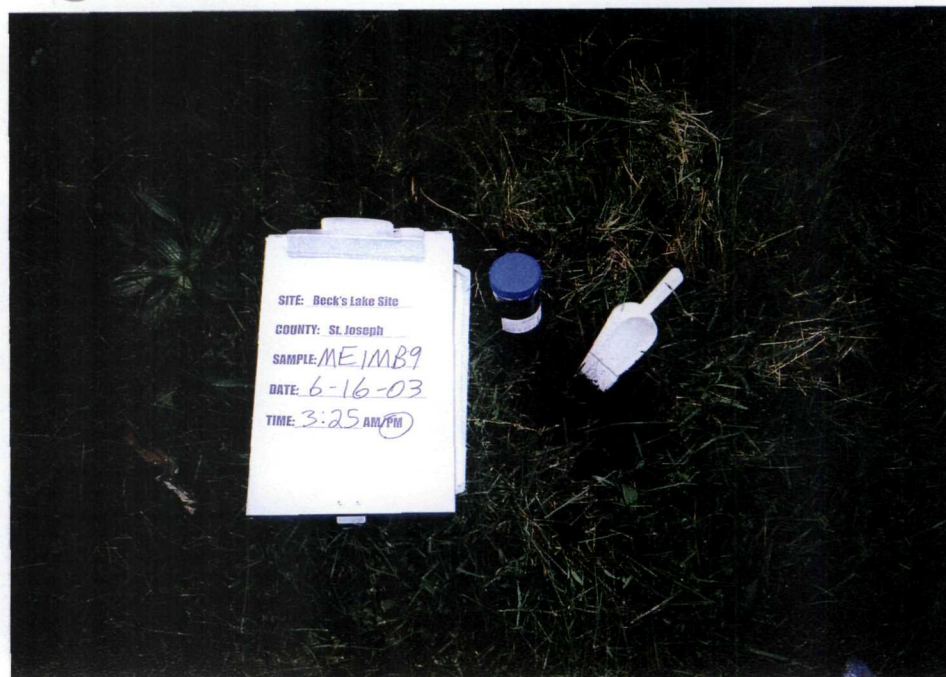
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB8 (S9)
Date: June 16, 2003
Time: 3:05 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
706 Brookfield.



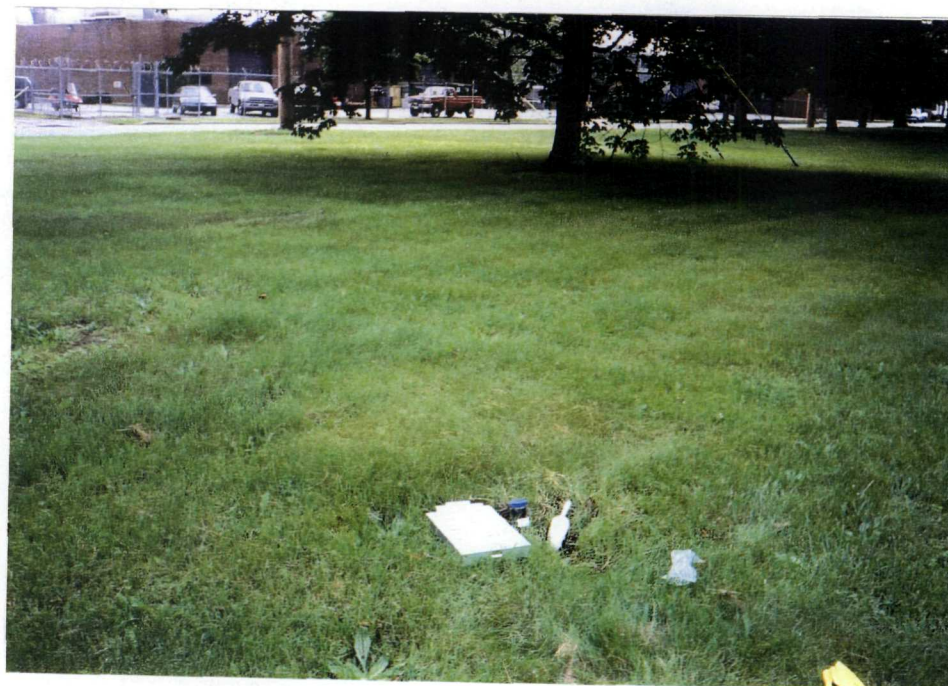
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB8 (S9)
Date: June 16, 2003
Time: 3:05 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
706 Brookfield.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB9 (S10)
Date: June 16, 2001
Time: 3:25 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
Southeast corner of Bendix Park.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MB9 (S10)
Date: June 16, 2001
Time: 3:25 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
Southeast corner of Bendix Park.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC0 (S11)
Date: June 16, 2003
Time: 3:45 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
Park on Sussex Ave. west of Alex
Coquillard Elementary School.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC0 (S11)
Date: June 16, 2003
Time: 3:45 PM
Weather: Warm, sunny
Photo By: Trevor Fuller
Description: Surface soil sample taken from
Park on Sussex Ave. west of Alex
Coquillard Elementary School.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC2 (S12)
Date: June 16, 2001
Time: 11:30 AM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
109 Bendix Drive.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC2 (S12)
Date: June 16, 2001
Time: 11:30 AM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
109 Bendix Drive.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC3 (S13)
Date: June 16, 2003
Time: 11:40 AM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
126 S. Camden Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC3 (S13)
Date: June 16, 2003
Time: 11:40 AM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
126 S. Camden Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC4 (S14)
Date: June 16, 2001
Time: 12:00 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
138 South Dundee.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC4 (S14)
Date: June 16, 2001
Time: 12:00 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
138 South Dundee.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC5 (S15)
Date: June 16, 2003
Time: 12:20 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
138 South Kentucky.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC5 (S15)
Date: June 16, 2003
Time: 12:20 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
138 South Kentucky.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC6 (S16)
Date: June 16, 2001
Time: 12:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
118 South Lake Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC6 (S16)
Date: June 16, 2001
Time: 12:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
118 South Lake Street.



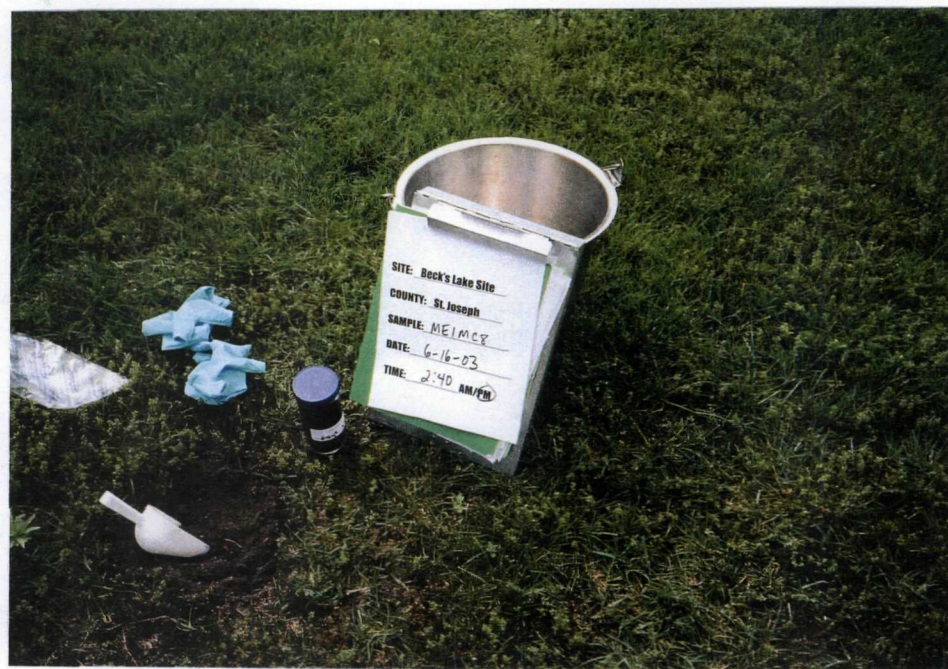
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC7 (S17)
Date: June 16, 2003
Time: 1:00 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
114 S. Lake Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC7 (S17)
Date: June 16, 2003
Time: 1:00 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
114 S. Lake Street.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC8 (S18)
Date: June 16, 2001
Time: 2:40 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
217 North Wellington.



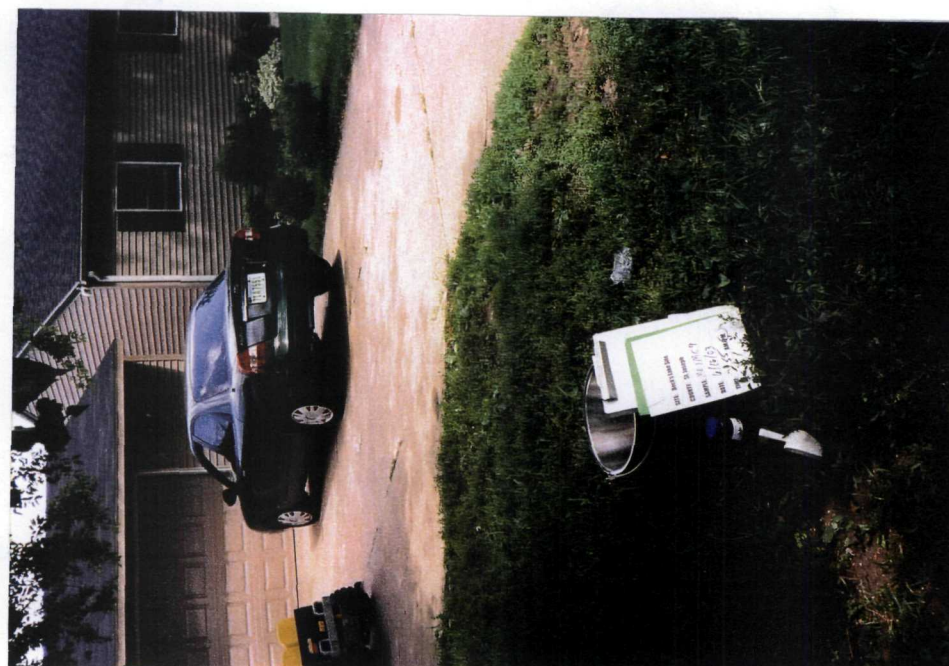
Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC8 (S18)
Date: June 16, 2001
Time: 2:40 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
217 North Wellington.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC9 (S19)
Date: June 16, 2003
Time: 2:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
218 North Illinois.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MC9 (S19)
Date: June 16, 2003
Time: 2:55 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
218 North Illinois.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MD0 (S20)
Date: June 16, 2001
Time: 3:15 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
217 Kenmore.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MD0 (S20)
Date: June 16, 2001
Time: 3:15 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
217 Kenmore.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MD1 (S21)
Date: June 16, 2003
Time: 3:35 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
102 South Falcon.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MD1 (S21)
Date: June 16, 2003
Time: 3:35 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
102 South Falcon.



Site: LaSalle Park/Beck's Lake
South Bend, IN
Sample #: ME1MD2 (S22)
Date: June 16, 2001
Time: 3:40 PM
Weather: Warm, sunny
Photo By: Dan Chesterson
Description: Surface soil sample taken from
102 South Falcon.



APPENDIX B

Chemical Analysis

DATE: July 21, 2003

Indiana Dept of Environmental Management
Office of Environmental/Site Investigation Section
P.O. Box 6015
100 N. Senate Avenue
Indianapolis, IN 46206-6015

Attn: Mark Jaworski

SITE NAME: Becks Lake

CASE NO	LAB	NO # OF SAMPLES	SDG	MATRIX
31852	Ceimic	2	ME1MB9	Soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by: _____ Date: _____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

Received by Data Management Coordinator, CRL for file.

Date: _____

Signature: _____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

RECEIVED

JUL 24 2003

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

JUL 21 2003

Page 1 of 5

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V**

DATE: 7/17/03

SUBJECT: Review of Data
Received for review on 7/14/03

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

We have reviewed the data by CADRE for the following case:

SITE NAME: Becks Lake (IN)

CASE NUMBER: 31852 **SDG NUMBER:** ME1MB9

Number and Type of Samples: 2 soils

Sample Numbers: ME1MB9, C0

Laboratory: Ceimic **Hrs. for Review:**

Following are our findings:

This is a Level 2 narrative. It is an assembly of CADRE files provided to ESAT. The data have NOT been reviewed.

CC: Cecilia Moore
Region 5 TOPO
Mail Code: SMF-4J

Case:
Site:

SDG:
Laboratory:

Page 2 of 5

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

NUMBER (##) MATRIX samples, numbered ##, were collected on DATE. The lab received the samples on DATE in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.2 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric (ICP-AES) procedure.

Assembled by: Stephen Connet
Date: 7/17/03

Case:
Site:

SDG:
Laboratory:

Page 3 of 5

1. HOLDING TIME:

Qualification: Holding Time Protocol: INORG

DC-10 The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME1MB9, ME1MC0, ME1MC0D, ME1MC0S

2. CALIBRATIONS:

Qualification: Calibrations Protocol: INORG

No defects found.

Qualification: CRDL/CRQL Standard Protocol: INORG

No defects found.

3. BLANKS:

Qualification: Laboratory Blanks Protocol: INORG

No defects found.

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

Qualification: Matrix Spikes Protocol: INORG

No defects found.

Qualification: Laboratory Control Sample Protocol: INORG

No defects found.

5. LABORATORY AND FIELD DUPLICATE:

Qualification: Duplicates Protocol: INORG

No defects found.

6. ICP ANALYSIS:

Qualification: Serial Dilution Protocol: INORG

DC-4 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in criteria. The serial dilution result is greater than the sample result, indicating a potential negative interference. The data must be qualified using professional judgement. Hits and non-detects are not flagged.

Beryllium

ME1MB9, ME1MC0

Cadmium

Assembled by: Stephen Connet

Date: 7/17/03

Case:
Site:

SDG:
Laboratory:

Page 4 of 5

ME1MB9, ME1MC0

Calcium

ME1MB9, ME1MC0

Cobalt

ME1MB9, ME1MC0

Copper

ME1MB9, ME1MC0

Magnesium

ME1MB9, ME1MC0

Potassium

ME1MB9, ME1MC0

DC-6 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in criteria. The serial dilution result is a non-detect. Use professional judgement to qualify sample data.

Sodium

ME1MB9, ME1MC0

Qualification: Interference Check Sample Protocol: INORG

No defects found.

7. GFAA ANALYSIS:

No GFAA analyses were performed for this case.

8. SAMPLE RESULTS:

Qualification: Sample Result Verification Protocol: INORG

No defects found.

Qualification: CADRE Reserved Protocol: INORG

DC-2 Verification of non-detected results and assignment of "U" qualifier when the reported value is less than detection limit.

ME1MB9, ME1MC0, ME1MC0D, PBS01

Assembled by: Stephen Connet
Date: 7/17/03

Analytical Results (Qualified Data)

Page ____ of ____

Case #: 51852

SDG : ME1MB9

Site :

BECKS LAKE

Lab. :

CEIMIC

Number of Soil Samples : 2

Reviewer :

Number of Water Samples : 0

Date :

Sample Number :	ME1MB9		ME1MC0		ME1MC0D		ME1MC0S			
Sampling Location :	S10		S11		S11		S11			
Matrix :	Soil		Soil		Soil		Soil			
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Date Sampled :	06/16/2003		06/16/2003		06/16/2003		06/16/2003			
Time Sampled :	13:25		13:45		13:45		13:45			
%Solids :	80.6		91.8		93.7		91.8			
Dilution Factor :	1.0		1.0		1.0		1.0			
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	5060		6680		5680		7280			
ANTIMONY	10.3	U	10.9	U	10.9	U	3.9			
ARSENIC	1.9		3.5		3.3		10.2			
BARIUM	49.0		92.1		84.2		443			
BERYLLIUM	0.36		0.44		0.40		8.7			
CADMIUM	0.80		0.79		0.70		9.1			
CALCIUM	2020		2010		1810		1910			
CHROMIUM	12.8		21.6		20.6		56.0			
COBALT	1.5		4.6		4.1		90.8			
COPPER	13.0		10.8		10.2		54.0			
IRON	3580		8450		7310		8820			
LEAD	80.5		22.0		20.7		25.2			
MAGNESIUM	748		1370		1190		1300			
MANGANESE	69.8		480		426		546			
MERCURY	0.080		0.060		0.070		0.59			
NICKEL	4.5		7.4		6.3		94.1			
POTASSIUM	243		637		549		670			
SELENIUM	6.0	U	6.4	U	6.4	U	5.8			
SILVER	1.7	U	1.8	U	1.8	U	7.1			
SODIUM	39.5		38.7		40.9		37.1			
THALLIUM	4.3	U	4.5	U	4.5	U	9.5			
VANADIUM	7.8		14.5		12.5		93.9			
ZINC	47.8		75.2		65.2		159			

DISCLAIMER This package has been electronically assessed as an added service to our customer. It has not been either validated or approved by Region 5 and any subsequent use by the data user is strictly at the risk of the data user. Region 5 assumes no responsibility for use of unvalidated data.



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Date Shipped: 6/17/03	Carrier Name: FedEx	Airbill: 834176501924	Shipped to: Celmic Corporation 10 Dean Krauss Drive Narragansett RI 02882 (401) 782-8900
Chain of Custody Record		Relinquished By: <i>[Signature]</i> (Date / Time) 6/17/03 1:30 PM	Sampler Signature: <i>[Signature]</i> Received By: <i>[Signature]</i> (Date / Time) 6/18/03 10:00
2		3	4
3		4	
4			

INORGANIC SAMPLE No.	MATRIX SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME1MB0	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021509 (Ice Only) (1)	S1	S: 6/16/03 10:55		
ME1MB1	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021510 (Ice Only) (1)	S2	S: 6/16/03 11:30		
ME1MB2	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021511 (Ice Only) (1)	S3	S: 6/16/03 11:45		
ME1MB3	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021512 (Ice Only) (1)	S4	S: 6/16/03 12:15		
ME1MB4	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021513 (Ice Only) (1)	S5	S: 6/16/03 12:30		
ME1MB5	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021514 (Ice Only) (1)	S6	S: 6/16/03 12:55		
ME1MB6	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021515 (Ice Only) (1)	S7	S: 6/16/03 14:30		
ME1MB7	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021516 (Ice Only) (1)	S8	S: 6/16/03 14:30		
ME1MB8	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021517 (Ice Only) (1)	S9	S: 6/16/03 13:05		
ME1MB9	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021518 (Ice Only) (1)	S10	S: 6/16/03 13:25		

= last sample in SDG ME1MBO

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>[Signature]</i>	Color Temperature Upon Receipt: <i>EA</i> 6/18/03	Chain of Custody Seal Number: 20409 20410
Analysis Key: ICP/MS = CLP TAL Total Metals ICP/MS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TR Number: 5-292371269-053103-0001

PR provides pre-lab results. Requests for preliminary results will increase analytical costs.
Send Copy to: S Management Office, 2000 Edmund Halley Dr., Reston, VA, 20191-3400 Phone 703-4348-9348 Fax 703-264-9222

COPY
Original Documents are included in CSF
ME1MBO



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 31852
DAS No:
SDG No: ME1MB9

3

Date Shipped: 6/17/03
Carrier Name: FedEx
Airbill: 834176501924
Shipped to: Ceimic Corporation
10 Dean Krauss Drive
Narragansett RI 02882
(401) 782-8900

Chain of Custody Record			Sampler Signature:
Relinquished By	(Date / Time)	Received By	(Date / Time)
1 <i>[Signature]</i>	6/17/03 1:30pm	Elizabeth Asting	6/18/03 10:00
2		CA	
3			
4			

For Lab Use Only
Lab Contract No: 68W02063
Unit Price: A13
Transfer To: CA 6/18/03
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME1MC0	Soil (0"-12")	M/G	ICP/MS (21)	5021519 (Ice Only) (1)	S11	S: 6/16/03 13:45		
Dan Chesterson								

Shipment for Case Complete?	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number: CA 6/18/03
Analysts Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Rec'd? <input checked="" type="checkbox"/>
ICP/MS - CLP TAL Total Metals ICP/MS				

SDG Narrative

Laboratory Name: Ceimic Corporation

Case No.: 31852

SDG No.: ME1MB9

Contract: 68W02063

Ceimic Project No.: 030765

The following ILM05.2 (ICP-AES) two soil samples were received at Ceimic Corporation on June 18, 2003:

<u>EPA ID</u>	<u>Ceimic ID</u>
ME1MB9	030765-01
ME1MC0	030765-02
ME1MC0D	030765-02D
ME1MC0S	030765-02S

Comments on Data Package

The samples for case 31852 were received for ICP-AES and mercury analysis. This is despite the fact that the Traffic Reports / Chains of Custody indicate the need for ICP-MS analysis. Additionally, the sample tags indicate that mercury analysis was not to be performed; but Ceimic was asked to ignore the indication on the tags after consulting with Jessica Brown of the Sample Management Office.

The above samples were digested and analyzed in accordance with the Inorganic Statement of Work (SOW) ILM05.2.

QA/QC Samples:

No sample in this SDG was indicated for QC analysis. Ceimic decided to perform matrix spike and duplicate analysis on sample ME1MC0, and informed Ms. Brown of this decision. The choice of sample was made after receipt, but before digestion.

Serial dilution was performed on sample ME1MB9. A post-digestion spike of sample ME1MC0 was required for antimony and selenium.

Observations:

Observations:

A "U" flag in the C column on the sample result forms (Form I-IN) indicates that the concentration of that analyte in the sample is undetected at the method detection limit (MDL). If analytes are detected between the Contract Required Detection Limits (CRDL) and the MDL, a "J" flag is shown in the C column on the Form I-IN.


The "N" qualifier applied to Sb and Se. The "E" qualifier applies to Ca, Cu, and Mg.

Deviations from Contract:

None.

End of Case Narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Ryan C. Montalbano
Supervisor, Inorganic Laboratories

07/08/03

Date

JUL 14 2003

COVER PAGE

Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMIC Case No: 31852

NRAS No.: _____

SDG No: ME1MB9SOW No.: ILM05.2

EPA Sample No.

Lab Sample ID

ME1MB9030765-01ME1MC0030765-02ME1MC0D030765-02DME1MC0S030765-02S

ICP-AES ICP-MS

Were ICP-AES and ICP-MS interelement corrections applied?

(Yes/No)

YESNO

Were ICP-AES and ICP-MS background corrections applied?

(Yes/No)

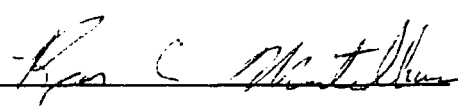
YESNO

If yes, were raw data generated before application of background corrections?

(Yes/No)

NONOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Ryan MontalbanoDate: 27/03/2003Title: Inorganic Laboratory Supervisor

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB9

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
 Matrix (soil/water): SOIL Lab Sample ID: 030765-01
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5060			P
7440-36-0	Antimony	10.3	U	N	P
7440-38-2	Arsenic	1.9	J		P
7440-39-3	Barium	49.0			P
7440-41-7	Beryllium	0.36	J		P
7440-43-9	Cadmium	0.80	J		P
7440-70-2	Calcium	2020		E	P
7440-47-3	Chromium	12.8			P
7440-48-4	Cobalt	1.5	J		P
7440-50-8	Copper	13.0		E	P
7439-89-6	Iron	3580			P
7439-92-1	Lead	60.5			P
7439-95-4	Magnesium	748	J	E	P
7439-96-5	Manganese	69.8			P
7439-97-6	Mercury	0.079	J		CV
7440-02-0	Nickel	4.5	J		P
7440-09-7	Potassium	243	J		P
7782-49-2	Selenium	6.0	U	N	P
7440-22-4	Silver	1.7	U		P
7440-23-5	Sodium	39.5	J		P
7440-28-0	Thallium	4.3	U		P
7440-62-2	Vanadium	7.8	J		P
7440-66-6	Zinc	47.8			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC0

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
 Matrix (soil/water): SOIL Lab Sample ID: 030765-02
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 91.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6680			P
7440-36-0	Antimony	10.9	U	N	P
7440-38-2	Arsenic	3.5			P
7440-39-3	Barium	92.1			P
7440-41-7	Beryllium	0.44	J		P
7440-43-9	Cadmium	0.79	J		P
7440-70-2	Calcium	2010		E	P
7440-47-3	Chromium	21.6			P
7440-48-4	Cobalt	4.6	J		P
7440-50-8	Copper	10.8		E	P
7439-89-6	Iron	8450			P
7439-92-1	Lead	22.0			P
7439-95-4	Magnesium	1370		E	P
7439-96-5	Manganese	480			P
7439-97-6	Mercury	0.062	J		CV
7440-02-0	Nickel	7.4			P
7440-09-7	Potassium	637	J		P
7782-49-2	Selenium	6.4	U	N	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	38.7	J		P
7440-28-0	Thallium	4.5	U		P
7440-62-2	Vanadium	14.5			P
7440-66-6	Zinc	75.2			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	200.0	U	26.7	J	200.0	U	40.7	J	6.470	J	P
Antimony	60.0	U	60.0	U	60.0	U	60.0	U	12.000	U	P
Arsenic	15.0	U	15.0	U	15.0	U	15.0	U	3.000	U	P
Barium	200.0	U	1.6	J	200.0	U	1.1	J	40.000	U	P
Beryllium	5.0	U	0.2	J	5.0	U	0.3	J	1.000	U	P
Cadmium	5.0	U	0.3	J	5.0	U	0.2	J	1.000	U	P
Calcium	5000.0	U	5000.0	U	5000.0	U	41.5	J	12.748	J	P
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Cobalt	50.0	U	0.7	J	50.0	U	50.0	U	10.000	U	P
Copper	25.0	U	25.0	U	25.0	U	0.8	J	5.000	U	P
Iron	100.0	U	100.0	U	100.0	U	100.0	U	20.000	U	P
Lead	10.0	U	10.0	U	10.0	U	10.0	U	0.258	J	P
Magnesium	5000.0	U	36.6	J	5000.0	U	30.2	J	1000.000	U	P
Manganese	15.0	U	15.0	U	15.0	U	15.0	U	0.370	J	P
Mercury									0.100	U	CV
Nickel	40.0	U	1.1	J	40.0	U	40.0	U	0.253	J	P
Potassium	72.9	J	58.6	J	5000.0	U	63.2	J	17.525	J	P
Selenium	-6.7	J	35.0	U	35.0	U	35.0	U	-1.103	J	P
Silver	10.0	U	0.7	J	10.0	U	0.8	J	2.000	U	P
Sodium	-20.4	J	5000.0	U	5000.0	U	5000.0	U	19.601	J	P
Thallium	25.0	U	25.0	U	25.0	U	25.0	U	0.323	J	P
Vanadium	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Zinc	60.0	U	60.0	U	60.0	U	60.0	U	12.000	U	P

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum			44.4	J							P
Antimony			60.0	U							P
Arsenic			15.0	U							P
Barium			1.3	J							P
Beryllium			0.3	J							P
Cadmium			5.0	U							P
Calcium			38.1	J							P
Chromium			10.0	U							P
Cobalt			50.0	U							P
Copper			25.0	U							P
Iron			100.0	U							P
Lead			10.0	U							P
Magnesium			33.2	J							P
Manganese			15.0	U							P
Nickel			1.2	J							P
Potassium			5000.0	U							P
Selenium			35.0	U							P
Silver			10.0	U							P
Sodium			5000.0	U							P
Thallium			25.0	U							P
Vanadium			50.0	U							P
Zinc			60.0	U							P

USEPA-CLP

3-IN
BLANKS

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
Preparation Blank Matrix (soil/water): WATER
Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.200	U	0.200	U	0.200	U					CV

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG NO.: ME1MB9ICP-AES Instrument ID: PE Optima ICPICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700	247164.70	102	248243.80	103	42903.09	100	242999.09	101
Antimony	0	568	-20.12		570.50	100	-17.08		531.93	94
Arsenic	0	94	-7.88		84.83	90	-5.08		82.82	88
Barium	0	503	2.16		523.99	104	1.99		507.83	101
Beryllium	0	467	-0.14		506.34	108	0.06		489.45	105
Cadmium	0	936	3.10		992.04	106	2.60		926.23	99
Calcium	233100	232200	252881.41	108	253389.41	109	49751.70	107	251470.50	108
Chromium	37	485	38.56	104	518.48	107	37.49	101	503.07	104
Cobalt	0	463	3.20		488.96	106	2.67		469.03	101
Copper	0	511	4.40		513.78	101	4.44		499.70	98
Iron	93880	93680	99450.84	106	99550.02	106	96904.23	103	96792.39	103
Lead	0	52	-10.08		39.55	76	-8.14		38.25	74
Magnesium	247700	246400	254099.30	103	254279.91	103	47221.00	100	247197.80	100
Manganese	0	486	26.07		522.14	107	25.26		507.20	104
Nickel	0	912	7.78		945.34	104	7.03		907.90	100
Potassium	0		107.20		112.74		101.95		121.18	
Selenium	0	47	16.41		53.67	114	2.34		46.57	99
Silver	0	203	0.25		202.80	100	0.67		198.20	98
Sodium	0		658.23		644.00		635.94		627.18	
Thallium	0	92	-15.01		82.77	90	-14.73		88.22	96
Vanadium	0	471	14.43		503.14	107	13.44		490.01	104
Zinc	0	975	45.51		1022.00	105	41.45		952.98	98

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG NO.: ME1MB9ICP-AES Instrument ID: PE Optima ICPICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700					40692.41	100	241425.70	100
Antimony	0	568					-18.25		532.87	94
Arsenic	0	94					-4.36		83.24	89
Barium	0	503					2.15		505.43	100
Beryllium	0	467					0.12		488.63	105
Cadmium	0	936					2.55		917.17	98
Calcium	233100	232200					49513.91	107	249239.00	107
Chromium	37	485					36.66	99	501.24	103
Cobalt	0	463					2.28		469.02	101
Copper	0	511					3.27		497.96	97
Iron	93880	93680					96341.72	103	96174.61	103
Lead	0	52					-9.52		37.22	72
Magnesium	247700	246400					46328.09	99	245818.70	100
Manganese	0	486					25.34		506.94	104
Nickel	0	912					6.99		904.06	99
Potassium	0						119.23		110.09	
Selenium	0	47					2.84		48.21	103
Silver	0	203					0.10		197.10	97
Sodium	0						638.50		622.80	
Thallium	0	92					-14.32		83.94	91
Vanadium	0	471					15.89		491.81	104
Zinc	0	975					40.15		942.81	97

USEPA-CLP

5A-IN

MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME1MC0S

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG NO.: ME1MB9Matrix (soil/water): SOILLevel (low/med): LOW% Solids for Sample: 91.8

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		7281.0278		6675.3608		0.00	0		NR
Antimony	75 - 125	3.8891	J	10.8932	U	18.16	21	N	P
Arsenic	75 - 125	10.1622		3.4766		7.26	92		P
Barium	75 - 125	442.6343		92.0676		363.11	97		P
Beryllium	75 - 125	8.7129		0.4381	J	9.08	91		P
Cadmium	75 - 125	9.0648		0.7854	J	9.08	91		P
Calcium		1909.9500		2009.5510		0.00	0		NR
Chromium	75 - 125	55.9537		21.6144		36.31	95		P
Cobalt	75 - 125	90.8056		4.6451	J	90.78	95		P
Copper	75 - 125	53.9701		10.7750		45.39	95		P
Iron		8818.7002		8446.2783		0.00	0		NR
Lead		25.2196		21.9594		3.63	90		P
Magnesium		1298.5090		1368.2820		0.00	0		NR
Manganese		545.6621		480.1392		90.78	72		P
Mercury	75 - 125	0.5949		0.0622	J	0.54	99		CV
Nickel	75 - 125	94.1146		7.3681		90.78	96		P
Potassium		670.1297	J	636.7228	J	0.00	0		NR
Selenium	75 - 125	5.9234	J	6.3544	U	9.08	65	N	P
Silver	75 - 125	7.0986		1.8155	U	9.08	78		P
Sodium		37.1139	J	38.7377	J	0.00	0		NR
Thallium	75 - 125	9.5190		4.5389	U	9.08	105		P
Vanadium	75 - 125	93.8598		14.5362		90.78	87		P
Zinc	75 - 125	159.1208		75.1818		90.78	92		P

Comments:

USEPA-CLP

5B-IN

POST-DIGESTION SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME1MC0A

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
Matrix (soil/water): SOIL Level (low/med): LOW
Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Antimony		112.97	60.00 U	120.0	94		P
Selenium		53.65	35.00 U	70.0	77		P

Comments:

USEPA-CLP

6-IN

DUPLICATES

EPA SAMPLE NO.

ME1MC0D

Lab Name: CEIMIC CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG
NO.:ME1MB9Matrix (soil/water): SOILLevel (low/med): LOW% Solids for Sample: 91.8% Solids for Duplicate: 93.7

Concentration Units: (ug/L or mg/kg dry weight):

MG/KG

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		6675.3608	5681.8789	16		P
Antimony		10.8932 U	10.8932 U			P
Arsenic	2.7233	3.4766	3.2955	5		P
Barium	36.3108	92.0676	84.1708	9		P
Beryllium		0.4381 J	0.3976 J	10		P
Cadmium		0.7854 J	0.6988 J	12		P
Calcium	907.7704	2009.5510	1812.4360	10		P
Chromium		21.6144	20.6176	5		P
Cobalt		4.6451 J	4.1312 J	12		P
Copper	4.5389	10.7750	10.2012	5		P
Iron		8446.2783	7306.2642	14		P
Lead		21.9594	20.7397	6		P
Magnesium	907.7704	1368.2820	1185.1710	14		P
Manganese		480.1392	426.2282	12		P
Mercury		0.0622 J	0.0689 J	10		CV
Nickel		7.3681	6.2847 J	16		P
Potassium		636.7228 J	548.8833 J	15		P
Selenium		6.3544 U	6.3544 U			P
Silver		1.8155 U	1.8155 U			P
Sodium		38.7377 J	40.8696 J	5		P
Thallium		4.5389 U	4.5389 U			P
Vanadium	9.0777	14.5362	12.5291	15		P
Zinc		75.1818	65.1935	14		P

7 - IN
LABORATORY CONTROL SAMPLE

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum				309.0	296.3		193.1 424.2	96	
Antimony				213.0	185.0		129.4 297.2	87	
Arsenic				930.0	1007.7		613.6 1247.0	108	
Barium				5.3	4.6	J	2.5 8.1	87	
Beryllium				18.8	18.8		15.3 22.2	100	
Cadmium				41.6	42.6		32.1 51.1	102	
Calcium				184000.0	180310.3		42933.0 25376.0	98	
Chromium				96.5	99.4		77.8 115.2	103	
Cobalt				140.0	147.3		115.4 165.6	105	
Copper				6680.0	7051.5		5727.3 7633.1	106	
Iron				21000.0	21667.1		16831.3 25193.0	103	
Lead				224.0	220.7		167.6 280.5	99	
Magnesium				113000.0	109099.7		97943.0 28886.0	97	
Manganese				201.0	216.5		167.9 234.4	108	
Mercury				12.3	12.4		7.8 16.9	101	
Nickel				56.8	58.6		43.5 70.1	103	
Potassium				102.4	71.5	J	0.0 379.3	70	
Selenium				37.0	36.4		17.6 56.4	98	
Silver				20.9	21.7		13.2 28.5	104	
Sodium				92.8	55.0	J	0.0 277.4	59	
Thallium				38.1	33.1		24.6 51.6	87	
Vanadium				65.8	71.3		53.0 78.6	108	
Zinc				175.0	165.3		127.7 222.1	94	

8-IN

ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

ME1MB9L

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852

NRAS No.: _____

SDG NO.: ME1MB9Matrix (soil/water): SOILLevel (low/med): LOWConcentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	29379.90		30820.52		5		P
Antimony	60.00	U	300.00	U			P
Arsenic	11.28	J	75.00	U	100		P
Barium	284.26		291.45	J	3		P
Beryllium	2.07	J	2.55	J	23		P
Cadmium	4.63	J	5.35	J	16		P
Calcium	11736.83		12995.68	J	11	E	P
Chromium	74.26		74.34		0		P
Cobalt	8.98	J	10.73	J	19		P
Copper	75.29		101.07	J	34	E	P
Iron	20785.55		21536.13		4		P
Lead	351.16		365.49		4		P
Magnesium	4343.57	J	5062.58	J	17	E	P
Manganese	405.01		418.12		3		P
Nickel	25.95	J	27.50	J	6		P
Potassium	1409.97	J	2443.17	J	73		P
Selenium	35.00	U	175.00	U			P
Silver	10.00	U	50.00	U			P
Sodium	229.40	J	25000.00	U	100		P
Thallium	25.00	U	125.00	U			P
Vanadium	45.22	J	46.65	J	3		P
Zinc	277.19		280.89	J	1		P

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9

Instrument Type: CV Instrument ID: FIMS CVAA Date: 1/27/2003

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.2	0.03

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

I Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9

Instrument Type: CV Instrument ID: FIMS CVAA Date: 1/27/2003

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.10	0.04

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

I Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9

Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003

Preparation Method: NP1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	200	23.51
Antimony	206.83	60	2.90
Arsenic	188.98	15	4.46
Barium	233.53	200	1.04
Beryllium	313.11	5	0.14
Cadmium	226.50	5	0.20
Calcium	315.89	5000	35.71
Chromium	267.72	10	0.66
Cobalt	228.62	50	0.45
Copper	324.75	25	0.67
Iron	273.96	100	9.44
Lead	220.35	10	1.48
Magnesium	279.08	5000	14.72
Manganese	257.61	15	0.68
Nickel	231.60	40	1.05
Potassium	766.49	5000	49.93
Selenium	196.03	35	6.04
Silver	338.29	10	0.66
Sodium	589.59	5000	19.93
Thallium	190.80	25	7.88
Vanadium	290.88	50	1.22
Zinc	206.20	60	1.26

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9

Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003

Preparation Method: HS1

Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	40.00	4.67
Antimony	206.83	12.00	0.22
Arsenic	188.98	3.00	0.46
Barium	233.53	40.00	0.51
Beryllium	313.11	1.00	0.04
Cadmium	226.50	1.00	0.03
Calcium	315.89	1000.00	3.00
Chromium	267.72	2.00	0.28
Cobalt	228.62	10.00	0.15
Copper	324.75	5.00	0.29
Iron	273.96	20.00	9.99
Lead	220.35	2.00	0.16
Magnesium	279.08	1000.00	6.43
Manganese	257.61	3.00	0.06
Nickel	231.60	8.00	0.13
Potassium	766.49	1000.00	7.36
Selenium	196.03	7.00	0.67
Silver	338.29	2.00	0.09
Sodium	589.59	1000.00	2.92
Thallium	190.80	5.00	0.28
Vanadium	290.88	10.00	0.19
Zinc	206.20	12.00	1.52

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

I Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB9

Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003

Preparation Method: HS1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	200	98.83
Antimony	206.83	60	5.60
Arsenic	188.98	15	6.94
Barium	233.53	200	12.03
Beryllium	313.11	5	0.28
Cadmium	226.50	5	0.31
Calcium	315.89	5000	39.12
Chromium	267.72	10	0.63
Cobalt	228.62	50	1.03
Copper	324.75	25	2.96
Iron	273.96	100	34.29
Lead	220.35	10	3.45
Magnesium	279.08	5000	11.80
Manganese	257.61	15	3.10
Nickel	231.60	40	2.61
Potassium	766.49	5000	114.52
Selenium	196.03	35	6.73
Silver	338.29	10	0.58
Sodium	589.59	5000	117.00
Thallium	190.80	25	7.44
Vanadium	290.88	50	1.94
Zinc	206.20	60	26.68

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBS01	6/20/2003	0.20	100
LCSS01	6/20/2003	0.05	100
ME1MB9	6/20/2003	0.20	100
ME1MC0	6/20/2003	0.20	100
ME1MC0S	6/20/2003	0.20	100
ME1MC0D	6/20/2003	0.20	100

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Geimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
Preparation Method: HS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBS01	6/22/2003	1.00	200
LCSS01	6/22/2003	1.00	200
ME1MB9	6/22/2003	1.44	200
ME1MC0	6/22/2003	1.20	200
ME1MC0D	6/22/2003	1.20	200
ME1MC0S	6/22/2003	1.20	200

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
S0	6/20/2003		100
S0.2	6/20/2003		100
S0.5	6/20/2003		100
S1.0	6/20/2003		100
S5.0	6/20/2003		100
S10.0	6/20/2003		100
ICV01	6/20/2003		100
ICB01	6/20/2003		100
CRI01	6/20/2003		100
CCV01	6/20/2003		100
CCB01	6/20/2003		100
CRI02	6/20/2003		100
CCV02	6/20/2003		100
CCB02	6/20/2003		100

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB9
 Preparation Method: NP1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
S0	7/7/2003		100
S	7/7/2003		100
ICV01	7/7/2003		100
ICB01	7/7/2003		100
CRI01	7/7/2003		100
ICSA01	7/7/2003		100
ICSAB01	7/7/2003		100
CCV01	7/7/2003		100
CCB01	7/7/2003		100
CCV02	7/7/2003		100
CCB02	7/7/2003		100
CRI02	7/7/2003		100
ICSA02	7/7/2003		100
ICSAB02	7/7/2003		100
CCV03	7/7/2003		100
CCB03	7/7/2003		100
CRI03	7/7/2003		100
ICSA03	7/7/2003		100
ICSAB03	7/7/2003		100
CCV04	7/7/2003		100
CCB04	7/7/2003		100

Comments: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: MEIMB9 CERCLIS No: 128980904379

Case No: 31852 Site Name/Location: Becks Lake

Contractor of EPA Lab: Cemic Data User: Idem

No. of Samples: 2 Date Sampled or Date Received: 7-14-03

Have Chain-of-Custody records been received? Yes / No

Have traffic reports or packing lists been received? Yes / No

If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?

Yes No

If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes / No

No of samples claimed: 2 No. of samples received: 2

Received by: Eva M. Dixon/ESAT Date: 7-14-03

Received by LSSS: Eva M. Dixon/ESAT Date: 7-14-03

Review started: Reviewer Signature: [Signature]

Total time spent on review: 1 Date review completed: 7-17-03

Copied by: Eva M. Dixon/ESAT Date: 7-21-03

Mailed to user by: Eva M. Dixon/ESAT Date: 7-21-03

DATA USER:

Please fill in the blanks below and return this form to:

Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: Date:

Data review received by: Date:

Inorganic Data Complete

☐ Suitable for Intended Purpose ☒ if OK

Organic Data Complete

☐ Suitable for Intended Purpose ☒ if OK

Dioxin data Complete

☐ Suitable for Intended Purpose ☒ if OK

SAS Data Complete

☐ Suitable for Intended Purpose ☒ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date:

DATE: July 21, 2003

Indiana Dept of Environmental Management
Office of Environmental/Site Investigation Section
P.O. Box 6015
100 N. Senate Avenue
Indianapolis, IN 46206-6015

Attn: Mark Jaworski

SITE NAME: Becks Lake

CASE NO	LAB	NO # OF SAMPLES	SDG	MATRIX
31852	Ceimic	20	ME1MB0	Soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by: _____ Date: _____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

Received by Data Management Coordinator, CRL for file.

Date: _____

Signature: _____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

RECEIVED

JUL 24 2003

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

JUL 21 2003

Page 1 of 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/17/03

SUBJECT: Review of Data
Received for review on 7/14/03

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IDEM

We have reviewed the data by CADRE for the following case:

SITE NAME: Becks Lake (IN)

CASE NUMBER: 31852 SDG NUMBER: ME1MB0

Number and Type of Samples: 20 soils

Sample Numbers: ME1MB0-8, C2-9, D0-2

Laboratory: Ceimic Hrs. for Review: _____

Following are our findings:

This is a Level 2 narrative. It is an assembly of CADRE files provided to ESAT. The data have NOT been reviewed.

CC: Cecilia Moore
Region 5 TOPO
Mail Code: SMF-4J

Case:
Site:

SDG:
Laboratory:

Page 2 of 5

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

NUMBER (##) MATRIX samples, numbered ##, were collected on DATE. The lab received the samples on DATE in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.2 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric (ICP-AES) procedure.

Assembled by: Stephen Connet
Date: 7/17/03

Case:
Site:

SDG:
Laboratory:

Page 3 of 5

1. HOLDING TIME:

Qualification: Holding Time Protocol: INORG

DC-10 The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME1MB0, ME1MB1, ME1MB2, ME1MB3, ME1MB4, ME1MB5, ME1MB6, ME1MB7, ME1MB8,
ME1MC2, ME1MC3, ME1MC4, ME1MC5, ME1MC6, ME1MC7, ME1MC8, ME1MC9, ME1MD0,
ME1MD1, ME1MD2, ME1MD2D, ME1MD2S

2. CALIBRATIONS:

Qualification: Calibrations Protocol: INORG

No defects found.

Qualification: CRDL/CRQL Standard Protocol: INORG

No defects found.

3. BLANKS:

Qualification: Laboratory Blanks Protocol: INORG

No defects found.

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

Qualification: Matrix Spikes Protocol: INORG

No defects found.

Qualification: Laboratory Control Sample Protocol: INORG

No defects found.

5. LABORATORY AND FIELD DUPLICATE:

Qualification: Duplicates Protocol: INORG

No defects found.

6. ICP ANALYSIS:

Qualification: Serial Dilution Protocol: INORG

DC-4 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in criteria. The serial dilution result is greater than the sample result, indicating a potential negative interference. The data must be qualified using professional judgement. Hits and non-detects are not flagged.

Copper

ME1MB0, ME1MB1, ME1MB2, ME1MB3, ME1MB4, ME1MB5, ME1MB6, ME1MB7, ME1MB8,
ME1MC2, ME1MC3, ME1MC4, ME1MC5, ME1MC6, ME1MC7, ME1MC8, ME1MC9, ME1MD0,

Assembled by: Stephen Connet

Date: 7/17/03

Case:
Site:

SDG:
Laboratory:

Page 4 of 5

ME1MD1, ME1MD2

Potassium

ME1MB0, ME1MB1, ME1MB2, ME1MB3, ME1MB4, ME1MB5, ME1MB6, ME1MB7, ME1MB8,
ME1MC2, ME1MC3, ME1MC4, ME1MC5, ME1MC6, ME1MC7, ME1MC8, ME1MC9, ME1MD0,
ME1MD1, ME1MD2

DC-6 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in criteria. The serial dilution result is a non-detect. Use professional judgement to qualify sample data.

Sodium

ME1MB0, ME1MB1, ME1MB2, ME1MB3, ME1MB4, ME1MB5, ME1MB6, ME1MB7, ME1MB8,
ME1MC2, ME1MC3, ME1MC4, ME1MC5, ME1MC6, ME1MC7, ME1MC8, ME1MC9, ME1MD0,
ME1MD1, ME1MD2

Qualification: Interference Check Sample Protocol: INORG

DC-10 The following inorganic samples have one or more interferents present at concentrations more than true amounts added in the ICSAB solution. Use Professional judgement to qualify sample data.

ME1MC7

7. GFAA ANALYSIS:

No GFAA analyses were performed for this case.

8. SAMPLE RESULTS:

Qualification: Sample Result Verification Protocol: INORG

No defects found.

Qualification: CADRE Reserved Protocol: INORG

DC-2 Verification of non-detected results and assignment of "U" qualifier when the reported value is less than detection limit.

ME1MB0, ME1MB1, ME1MB2, ME1MB3, ME1MB4, ME1MB5, ME1MB6, ME1MB7, ME1MB8,
ME1MC2, ME1MC3, ME1MC4, ME1MC5, ME1MC6, ME1MC7, ME1MC8, ME1MC9, ME1MD0,
ME1MD1, ME1MD2, ME1MD2D, ME1MD2S, PBS01

Assembled by: Stephen Connet
Date: 7/17/03

Case:
Site:

SDG:
Laboratory:

Page 5 of 5

CADRE ILM05.2 Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Assembled by: Stephen Connet
Date: 7/17/03

Analytical Results (Qualified Data)

Page ____ of ____

Case #: 31852

SDG : ME1MB0

Site :

BECKS LAKE

Lab. :

CEIMIC

Number of Soil Samples : 20

Reviewer :

Number of Water Samples : 0

Date :

Sample Number :	ME1MB0		ME1MB1		ME1MB2		ME1MB3		ME1MB4	
Sampling Location :	S1		S2		S3		S4		S5	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	06/16/2003		06/16/2003		06/16/2003		06/16/2003		06/16/2003	
Time Sampled :	10:55		11:30		11:45		12:15		12:30	
%Solids :	90.9		84.5		88.3		90.3		73.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4690		4920		4300		5010		4550	
ANTIMONY	25.5		12.9	U	12.7	U	13.3	U	14.1	U
ARSENIC	4.2		2.1		3.8		4.4		2.6	
BARIUM	122		61.7		78.8		76.3		60.0	
BERYLLIUM	0.60		0.75		0.55		0.53		0.39	
CADMIUM	1.1		2.0		1.2		0.89		0.67	
CALCIUM	5220		39600		4230		4740		2960	
CHROMIUM	16.3		74.6		9.7		10.2		7.9	
COBALT	3.2		2.8		2.6		2.7		1.7	
COPPER	25.0		113.7		23.0		22.9		19.7	
IRON	7500		11100		6370		7360		4030	
LEAD	167		70.0		166		248		179	
MAGNESIUM	1760		10300		1010		1510		942	
MANGANESE	241		345		164		212		87.9	
MERCURY	0.14		0.13		0.16		0.11		0.090	
NICKEL	6.5		6.4		8.6		5.4		4.3	
POTASSIUM	283		469		610		507		315	
SELENIUM	6.9	U	7.5	U	7.4	U	7.8	U	8.2	U
SILVER	2.0	U	2.2	U	2.1	U	2.2	U	2.4	U
SODIUM	134		198		78.6		125		90.6	
THALLIUM	4.9	U	5.4	U	5.3	U	5.5	U	5.9	U
VANADIUM	13.1		12.6		11.3		15.6		10.0	
ZINC	165		89.5		148		142		104	

DISCLAIMER: This package has been electronically assessed as an added service to our customer. It has not been either validated or approved by Region 5 and any subsequent use by the data user is strictly at the risk of the data user. Region 5 assumes no responsibility for use of unvalidated data.

Case #: 31852

SDG : ME1MB0

Site :

BECKS LAKE

Lab :

CEIMIC

Reviewer :

Date :

Sample Number :	ME1MB5		ME1MB6		ME1MB7		ME1MB8		ME1MC2	
Sampling Location :	S6		S7		S8		S9		S12	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	06/16/2003		06/16/2003		06/16/2003		06/16/2003		06/16/2003	
Time Sampled :	12:55		14:30		14:30		13:05		11:30	
%Solids :	84.7		95.8		95.7		86.9		78.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4820		5570		4970		4920		4950	
ANTIMONY	13.1	U	11.9	U	11.9	U	13.4	U	14.8	U
ARSENIC	3.5		2.8		2.2		10.7		7.3	
BARIUM	73.7		54.5		54.5		120		94.5	
BERYLLIUM	0.57		0.45		0.45		0.79		0.58	
CADMIUM	1.1		0.56		0.62		2.1		1.4	
CALCIUM	4840		3380		3190		3620		15000	
CHROMIUM	14.3		9.5		8.8		29.0		12.1	
COBALT	2.3		1.7		1.7		5.4		3.0	
COPPER	22.0		17.8		19.6		33.3		34.5	
IRON	5920		4420		4590		20200		13800	
LEAD	308		81.5		90.8		238		124	
MAGNESIUM	1570		1040		985		1300		2480	
MANGANESE	146		78.6		83.7		234		234	
MERCURY	0.13		0.060		0.070		0.23		1.0	
NICKEL	8.1		4.4		4.9		26.2		7.3	
POTASSIUM	279		373		375		405		673	
SELENIUM	7.7	U	7.0	U	7.0	U	7.8	U	8.6	U
SILVER	2.2	U	2.0	U	2.0	U	2.2	U	2.5	U
SODIUM	92.7		148		174		127		69.9	
THALLIUM	5.5	U	0.57		5.0	U	5.6	U	6.2	U
VANADIUM	13.3		10.5		9.9		18.2		18.1	
ZINC	152		62.2		71.6		222		126	

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Analytical Results (Qualified Data)

Page ____ of ____

Case #: 31852

SDG : ME1MB0

Site :

BECKS LAKE

Lab. :

CEIMIC

Reviewer :

Date :

Sample Number :	ME1MC3		ME1MC4		ME1MC5		ME1MC6		ME1MC7	
Sampling Location :	S13		S14		S15		S16		S17	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	06/16/2003		06/16/2003		06/16/2003		06/16/2003		06/16/2003	
Time Sampled :	11:40		12:00		12:20		12:55		13:00	
%Solids :	89.6		92.8		69.4		70.1		76.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	1950		4630		4800		5680		4240	
ANTIMONY	12.8	U	11.8	U	17.1	U	16.9	U	15.6	U
ARSENIC	5.4		7.2		26.2		13.0		24.7	
BARIUM	28.4		84.7		103		92.4		110	
BERYLLIUM	0.34		0.40		1.0		0.52		0.44	
CADMIUM	1.4		3.3		1.6		1.5		3.3	
CALCIUM	13000		21600		11500		13000		11800	
CHROMIUM	5.3		10.4		9.9		12.3		15.8	
COBALT	2.0		3.0		4.3		3.8		6.8	
COPPER	14.7		15.3		35.9		24.0		76.5	
IRON	6830		10500		16900		15000		44200	
LEAD	28.7		82.8		95.6		67.9		143	
MAGNESIUM	3020		2680		1970		2390		2920	
MANGANESE	145		213		288		120		238	
MERCURY	0.080		0.10		0.16		0.15		0.18	
NICKEL	4.1		6.0		10.6		8.9		18.2	
POTASSIUM	180		577		677		399		357	
SELENIUM	7.4	U	6.9	U	10.0	U	9.9	U	9.1	U
SILVER	2.1	U	2.0	U	2.9	U	2.8	U	2.6	U
SODIUM	47.9		58.6		82.8		104		152	
THALLIUM	5.3	U	4.9	U	7.1	U	7.1	U	6.5	U
VANADIUM	14.1		13.5		15.8		18.8		18.3	
ZINC	58.7		100		137		81.0		268	

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Analytical Results (Qualified Data)

Page ____ of ____

Case #: 31852

SDG : ME1MB0

Site :

BECKS LAKE

Lab. :

CEIMIC

Reviewer :

Date :

Sample Number :	ME1MC8		ME1MC9		ME1MD0		ME1MD1		ME1MD2	
Sampling Location :	S18		S19		S20		S21		S22	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	06/16/2003		06/16/2003		06/16/2003		06/16/2003		06/16/2003	
Time Sampled :	14:40		14:55		15:15		15:35		15:40	
%Solids :	90.1		89.1		80.9		79.6		78.6	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	2450		6140		4180		3390		3200	
ANTIMONY	12.9	U	13.0	U	14.5	U	15.1	U	15.1	U
ARSENIC	8.0		32.9		10.1		11.7		12.0	
BARIUM	37.3		147		65.2		67.8		87.3	
BERYLLIUM	0.23		0.46		0.50		0.32		0.28	
CADMIUM	0.97		7.3		1.2		0.70		0.98	
CALCIUM	11000		13900		19400		16600		37700	
CHROMIUM	29.6		152		11.3		7.6		8.7	
COBALT	1.7		5.1		4.2		2.5		2.7	
COPPER	17.3		70.5		21.7		11.4		14.3	
IRON	7420		15700		13100		9950		12800	
LEAD	30.8		137		47.7		39.9		47.4	
MAGNESIUM	1730		3930		3580		2340		3360	
MANGANESE	77.5		438		249		198		307	
MERCURY	0.070		0.92		0.080		0.090		0.080	
NICKEL	4.2		17.3		8.9		4.8		5.1	
POTASSIUM	487		779		439		430		321	
SELENIUM	7.5	U	7.6	U	8.5	U	8.8	U	8.8	U
SILVER	2.2	U	2.0		0.17		2.5	U	2.5	U
SODIUM	50.7		97.7		211		61.8		81.0	
THALLIUM	5.4	U	5.4	U	6.1	U	6.3	U	6.3	U
VANADIUM	10.7		17.3		14.3		10.8		10.3	
ZINC	52.9		829		85.9		48.0		62.3	

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Analytical Results (Qualified Data)

Page ____ of ____

Case #: 31852

SDG: ME1MB0

Site:

BECKS LAKE

Lab.:

CEIMIC

Reviewer:

Date:

Sample Number:	ME1MD2D		ME1MD2S							
Sampling Location:	S22		S22							
Matrix:	Soil		Soil							
Units:	mg/Kg		mg/Kg							
Date Sampled:	06/16/2003		06/16/2003							
Time Sampled:	15:40		15:40							
%Solids:	78.3		78.6							
Dilution Factor:	1.0		1.0							
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3320		4140							
ANTIMONY	15.1	U	5.9							
ARSENIC	13.0		22.4							
BARIUM	104		601							
BERYLLIUM	0.31		12.8							
CADMIUM	1.0		14.0							
CALCIUM	40300		41400							
CHROMIUM	6.7		57.4							
COBALT	3.0		131							
COPPER	14.8		78.1							
IRON	14800		13800							
LEAD	55.0		54.3							
MAGNESIUM	4180		3320							
MANGANESE	313		448							
MERCURY	0.090		0.72							
NICKEL	6.1		133							
POTASSIUM	363		389							
SELENIUM	8.8	U	8.8	U						
SILVER	0.17		11.5							
SODIUM	78.0		81.8							
THALLIUM	6.3	U	9.7							
VANADIUM	10.9		134							
ZINC	62.0		182							

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USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 31852
DAS No: BO
SDG No: ME1ME2 EA 6/18/03

L

Date Shipped: 6/17/03 Carrier Name: FedEx Airbill: 834176501935 Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	Chain of Custody Record		Sampler Signature:	For Lab Use Only Lab Contract No: 68W02063 Unit Price: K13 Transfer To: EA Lab Contract No: 6/18/03 Unit Price:	
	Relinquished By	(Date / Time)	Received By		(Date / Time)
	1 <i>David P. Clark</i>	6/17/03	Elizabeth Astorga		6/18/03 10:00
	2	EA			
	3		6/18/03		
4					

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME1MC2	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021520 (Ice Only) (1)	S12	S: 6/16/03 11:30		
ME1MC3	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021521 (Ice Only) (1)	S13	S: 6/16/03 11:40		
ME1MC4	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021522 (Ice Only) (1)	S14	S: 6/16/03 12:00		
ME1MC5	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021523 (Ice Only) (1)	S15	S: 6/16/03 12:20		
ME1MC6	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021524 (Ice Only) (1)	S16	S: 6/16/03 12:55		
ME1MC7	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021648 (Ice Only) (1)	S17	S: 6/16/03 13:00		
ME1MC8	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021649 (Ice Only) (1)	S18	S: 6/16/03 14:40		
ME1MC9	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021650 (Ice Only) (1)	S19	S: 6/16/03 14:55		
ME1MD0	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021652 (Ice Only) (1)	S20	S: 6/16/03 15:15		
ME1MD1	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021653 (Ice Only) (1)	S21	S: 6/16/03 15:35		

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: ME1MD2	Additional Sampler Signature(s): <i>Michael J. Clark</i>	Cooler Temperature Upon Receipt: EA 6/18/03	Chain of Custody Serial Number: 20411 20112
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

ICP/MS = CLP TAL Total Metals ICP/MS

TR Number: 5-292371269-053103-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: S Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 7

4-9348 Fax 703/264-9222

LABORATORY COPY



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 31852
DAS No:
SDG No: ^{BD}ME1MD2 6/18/03 **L**

Date Shipped: 6/17/03 Carrier Name: FedEx Airbill: 834176501935 Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	Chain of Custody Record		Sampler Signature:	For Lab Use Only Lab Contract No: 68W02063 Unit Price: A13 Transfer To: EA Lab Contract No: 6/18/03 Unit Price:	
	Relinquished By	(Date / Time)	Received By		(Date / Time)
	1 <i>[Signature]</i>	6/17/03 1:30 PM	Elizabeth Istinye		6/18/03 10:00
	2	EA			
	3	6/18/03			
4					

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME1MD2	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021654 (Ice Only) (1)	S22	S: 6/16/03 15:40		

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: ME1MD2	Additional Sampler Signature(s): <i>[Signature]</i>	Cooler Temperature Upon Receipt: EA 6/18/03	Chain of Custody Seal Number: 20411 20412
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
ICP/MS = CLP TAL Total Metals ICP/MS				

TR Number: 5-292371269-053103-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: S: Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703-49348 Fax 703/264-9222



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 31852
DAS No:
SDG No: MEIMBO/MEIMB9 L

Date Shipped: 6/17/03 Carrier Name: FedEx Airbill: 834176501924 Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	Chain of Custody Record		Sampler Signature:	For Lab Use Only Lab Contract No: 68W02063 Unit Price: P13 Transfer To: EA Lab Contract No: 6/18/03 Unit Price:	
	Relinquished By	(Date / Time)	Received By		(Date / Time)
	1 Daniel P. Christ	6/17/03 1:30 PM	Elizabeth Asting		6/18/03 10:00
	2	EA	6/18/03		
	3				
4					

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME1MB0	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021509 (Ice Only) (1)	S1	S: 6/16/03 10:55		
ME1MB1	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021510 (Ice Only) (1)	S2	S: 6/16/03 11:30		
ME1MB2	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021511 (Ice Only) (1)	S3	S: 6/16/03 11:45		
ME1MB3	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021512 (Ice Only) (1)	S4	S: 6/16/03 12:15		
ME1MB4	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021513 (Ice Only) (1)	S5	S: 6/16/03 12:30		
ME1MB5	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021514 (Ice Only) (1)	S6	S: 6/16/03 12:55		
ME1MB6	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021515 (Ice Only) (1)	S7	S: 6/16/03 14:30		
ME1MB7	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021516 (Ice Only) (1)	S8	S: 6/16/03 14:30		
ME1MB8*	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021517 (Ice Only) (1)	S9	S: 6/16/03 13:05		
ME1MB9	Soil (0"-12")/ Dan Chesterson	M/G	ICP/MS (21)	5021518 (Ice Only) (1)	S10	S: 6/16/03 13:25		

* = last sample in SDG MEIMBO

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Anne DeWitt</i>	Cooler Temperature Upon Receipt: EA 6/18/03	Chain of Custody Seal Number: 20409 20410
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
ICP/MS = CLP TAL Total Metals ICP/MS				

TR Number: 5-292371269-053103-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Environmental Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone: 703-434-9348 Fax 703/264-9222

SDG Narrative

Laboratory Name: Ceimic Corporation

Case No.: 31852

SDG No.: ME1MB0

Contract: 68W02063

Ceimic Project No.: 030764

The following ILM05.2 (ICP-AES) twenty soil samples were received at Ceimic Corporation on June 18, 2003:

<u>EPA ID</u>	<u>Ceimic ID</u>
ME1MB0	030764-12
ME1MB1	030764-13
ME1MB2	030764-14
ME1MB3	030764-15
ME1MB4	030764-16
ME1MB5	030764-17
ME1MB6	030764-18
ME1MB7	030764-19
ME1MB8	030764-20
ME1MC2	030764-01
ME1MC3	030764-02
ME1MC4	030764-03
ME1MC5	030764-04
ME1MC6	030764-05
ME1MC7	030764-06
ME1MC8	030764-07
ME1MC9	030764-08
ME1MD0	030764-09
ME1MD1	030764-10
ME1MD2	030764-11
ME1MD2D	030764-11D
ME1MD2S	030764-11S

Comments on Data Package

The samples for case 31852 were received for ICP-AES and mercury analysis. This is despite the fact that the Traffic Reports / Chains of Custody indicate the need for ICP-MS analysis. Additionally, the sample tags indicate that mercury analysis was not to be performed; but Ceimic was asked to ignore the indication on the tags after consulting with Jessica Brown of the Sample Management Office.

The above samples were digested and analyzed in accordance with the Inorganic Statement of Work (SOW) ILM05.2.

QA/QC Samples:

Matrix spike and duplicate analysis were performed on sample ME1MD2. Serial dilution was performed on sample ME1MC5. A post-digestion spike of sample ME1MD2 was required for antimony and selenium.

Observations:

A "U" flag in the C column on the sample result forms (Form I-IN) indicates that the concentration of that analyte in the sample is undetected at the method detection limit (MDL). If analytes are detected between the Contract Required Detection Limits (CRDL) and the MDL, a "J" flag is shown in the C column on the Form I-IN.

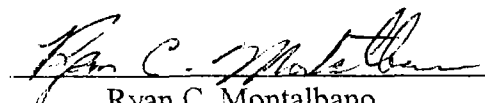
The "N" qualifier applied to Sb and Se. The "E" qualifier applies to Cu and K.

Deviations from Contract:

None.

End of Case Narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Ryan C. Montalbano
Supervisor, Inorganic Laboratories

07/09/03
Date

JUL 14 2003

COVER PAGE

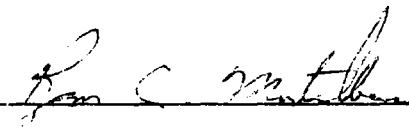
I. Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No: 31852 NRAS No.: _____ SDG No: ME1MB0
 SOW No.: ILM05.2

EPA Sample No.	Lab Sample ID
ME1MB0	030764-12
ME1MB1	030764-13
ME1MB2	030764-14
ME1MB3	030764-15
ME1MB4	030764-16
ME1MB5	030764-17
ME1MB6	030764-18
ME1MB7	030764-19
ME1MB8	030764-20
ME1MC2	030764-01
ME1MC3	030764-02
ME1MC4	030764-03
ME1MC5	030764-04
ME1MC6	030764-05
ME1MC7	030764-06
ME1MC8	030764-07
ME1MC9	030764-08
ME1MD0	030764-09
ME1MD1	030764-10
ME1MD2	030764-11

	(Yes/No)	ICP-AES	ICP-MS
Were ICP-AES and ICP-MS interelement corrections applied?	(Yes/No)	<u>YES</u>	<u>NO</u>
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No)	<u>YES</u>	<u>NO</u>
If yes, were raw data generated before application of background corrections?	(Yes/No)	<u>NO</u>	<u>NO</u>

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Ryan Montalbano
 Date: 07/14/03 Title: Inorganic Laboratory Supervisor

USEPA-CLP

COVER PAGE

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No: 31852 NRAS No.: _____ SDG No: ME1MB0
SOW No.: ILM05.2

EPA Sample No.

Lab Sample ID

ME1MD2D030764-11DME1MD2S030764-11S

ICP-AES ICP-MS

Were ICP-AES and ICP-MS interelement corrections applied?

(Yes/No)

YESNO

Were ICP-AES and ICP-MS background corrections applied?

(Yes/No)

YESNO

If yes, were raw data generated before application of background corrections?

(Yes/No)

NONO

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Ryan MontalbanoDate: 07/29/2003Title: Inorganic Laboratory Supervisor

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB0

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-12
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 90.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4690			P
7440-36-0	Antimony	25.5		N	P
7440-38-2	Arsenic	4.2			P
7440-39-3	Barium	122			P
7440-41-7	Beryllium	0.60	J		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	5220			P
7440-47-3	Chromium	16.3			P
7440-48-4	Cobalt	3.2	J		P
7440-50-8	Copper	25.0		E	P
7439-89-6	Iron	7500			P
7439-92-1	Lead	167			P
7439-95-4	Magnesium	1760			P
7439-96-5	Manganese	241			P
7439-97-6	Mercury	0.14			CV
7440-02-0	Nickel	6.5	J		P
7440-09-7	Potassium	283	J	E	P
7782-49-2	Selenium	6.9	U	N	P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	134	J		P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	13.1			P
7440-66-6	Zinc	165			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB1

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-13
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 84.5

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4920			P
7440-36-0	Antimony	12.9	U	N	P
7440-38-2	Arsenic	2.1	J		P
7440-39-3	Barium	61.7			P
7440-41-7	Beryllium	0.75	J		P
7440-43-9	Cadmium	2.0			P
7440-70-2	Calcium	39600			P
7440-47-3	Chromium	74.6			P
7440-48-4	Cobalt	2.8	J		P
7440-50-8	Copper	13.7		E	P
7439-89-6	Iron	11100			P
7439-92-1	Lead	70.0			P
7439-95-4	Magnesium	10300			P
7439-96-5	Manganese	345			P
7439-97-6	Mercury	0.13			CV
7440-02-0	Nickel	6.4	J		P
7440-09-7	Potassium	469	J	E	P
7782-49-2	Selenium	7.5	U	N	P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	198	J		P
7440-28-0	Thallium	5.4	U		P
7440-62-2	Vanadium	12.6			P
7440-66-6	Zinc	89.5			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB2

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-14
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 88.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4300			P
7440-36-0	Antimony	12.7	U	N	P
7440-38-2	Arsenic	3.8			P
7440-39-3	Barium	78.8			P
7440-41-7	Beryllium	0.55	J		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	4230			P
7440-47-3	Chromium	9.7			P
7440-48-4	Cobalt	2.6	J		P
7440-50-8	Copper	23.0		E	P
7439-89-6	Iron	6370			P
7439-92-1	Lead	166			P
7439-95-4	Magnesium	1010	J		P
7439-96-5	Manganese	164			P
7439-97-6	Mercury	0.16			CV
7440-02-0	Nickel	8.6			P
7440-09-7	Potassium	610	J	E	P
7782-49-2	Selenium	7.4	U	N	P
7440-22-4	Silver	2.1	U		P
7440-23-5	Sodium	78.6	J		P
7440-28-0	Thallium	5.3	U		P
7440-62-2	Vanadium	11.3			P
7440-66-6	Zinc	148			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

ments:

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EPA SAMPLE NO.

ME1MB3

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil./water): SOIL Lab Sample ID: 030764-15
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 90.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5010			P
7440-36-0	Antimony	13.3	U	N	P
7440-38-2	Arsenic	4.4			P
7440-39-3	Barium	76.3			P
7440-41-7	Beryllium	0.53	J		P
7440-43-9	Cadmium	0.89	J		P
7440-70-2	Calcium	4740			P
7440-47-3	Chromium	10.2			P
7440-48-4	Cobalt	2.7	J		P
7440-50-8	Copper	22.9		E	P
7439-89-6	Iron	7360			P
7439-92-1	Lead	248			P
7439-95-4	Magnesium	1510			P
7439-96-5	Manganese	212			P
7439-97-6	Mercury	0.11			CV
7440-02-0	Nickel	5.4	J		P
7440-09-7	Potassium	507	J	E	P
7782-49-2	Selenium	7.8	U	N	P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	125	J		P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	15.6			P
7440-66-6	Zinc	142			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB4

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-16
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 73.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4550			P
7440-36-0	Antimony	14.1	U	N	P
7440-38-2	Arsenic	2.6	J		P
7440-39-3	Barium	60.0			P
7440-41-7	Beryllium	0.39	J		P
7440-43-9	Cadmium	0.67	J		P
7440-70-2	Calcium	2960			P
7440-47-3	Chromium	7.9			P
7440-48-4	Cobalt	1.7	J		P
7440-50-8	Copper	19.7		E	P
7439-89-6	Iron	4030			P
7439-92-1	Lead	179			P
7439-95-4	Magnesium	942	J		P
7439-96-5	Manganese	87.9			P
7439-97-6	Mercury	0.091	J		CV
7440-02-0	Nickel	4.3	J		P
7440-09-7	Potassium	315	J	E	P
7782-49-2	Selenium	8.2	U	N	P
7440-22-4	Silver	2.4	U		P
7440-23-5	Sodium	90.6	J		P
7440-28-0	Thallium	5.9	U		P
7440-62-2	Vanadium	10.0	J		P
7440-66-6	Zinc	104			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

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EPA SAMPLE NO.

ME1MB5

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-17
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 84.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4820			P
7440-36-0	Antimony	13.1	U	N	P
7440-38-2	Arsenic	3.5			P
7440-39-3	Barium	73.7			P
7440-41-7	Beryllium	0.57	J		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	4840			P
7440-47-3	Chromium	14.3			P
7440-48-4	Cobalt	2.3	J		P
7440-50-8	Copper	22.0		E	P
7439-89-6	Iron	5920			P
7439-92-1	Lead	306			P
7439-95-4	Magnesium	1570			P
7439-96-5	Manganese	146			P
7439-97-6	Mercury	0.13			CV
7440-02-0	Nickel	6.1	J		P
7440-09-7	Potassium	279	J	E	P
7782-49-2	Selenium	7.7	U	N	P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	92.7	J		P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	13.3			P
7440-66-6	Zinc	152			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments: _____

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EPA SAMPLE NO.

ME1MB6

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-18
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 95.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5570			P
7440-36-0	Antimony	11.9	U	N	P
7440-38-2	Arsenic	2.8	J		P
7440-39-3	Barium	54.5			P
7440-41-7	Beryllium	0.45	J		P
7440-43-9	Cadmium	0.56	J		P
7440-70-2	Calcium	3380			P
7440-47-3	Chromium	9.5			P
7440-48-4	Cobalt	1.7	J		P
7440-50-8	Copper	17.8		E	P
7439-89-6	Iron	4420			P
7439-92-1	Lead	81.5			P
7439-95-4	Magnesium	1040			P
7439-96-5	Manganese	78.6			P
7439-97-6	Mercury	0.058	J		CV
7440-02-0	Nickel	4.4	J		P
7440-09-7	Potassium	373	J	E	P
7782-49-2	Selenium	7.0	U	N	P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	148	J		P
7440-28-0	Thallium	0.57	J		P
7440-62-2	Vanadium	10.5			P
7440-66-6	Zinc	62.2			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

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EPA SAMPLE NO.

ME1MB7

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-19
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 95.7
 Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4970			P
7440-36-0	Antimony	11.9	U	N	P
7440-38-2	Arsenic	2.2	J		P
7440-39-3	Barium	54.5			P
7440-41-7	Beryllium	0.45	J		P
7440-43-9	Cadmium	0.61	J		P
7440-70-2	Calcium	3190			P
7440-47-3	Chromium	8.8			P
7440-48-4	Cobalt	1.7	J		P
7440-50-8	Copper	19.6		E	P
7439-89-6	Iron	4590			P
7439-92-1	Lead	90.8			P
7439-95-4	Magnesium	985	J		P
7439-96-5	Manganese	83.7			P
7439-97-6	Mercury	0.073	J		CV
7440-02-0	Nickel	4.9	J		P
7440-09-7	Potassium	375	J	E	P
7782-49-2	Selenium	7.0	U	N	P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	174	J		P
7440-28-0	Thallium	5.0	U		P
7440-62-2	Vanadium	9.9	J		P
7440-66-6	Zinc	71.6			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MB8

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-20
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 86.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4920			P
7440-36-0	Antimony	13.4	U	N	P
7440-38-2	Arsenic	10.7			P
7440-39-3	Barium	120			P
7440-41-7	Beryllium	0.79	J		P
7440-43-9	Cadmium	2.1			P
7440-70-2	Calcium	3620			P
7440-47-3	Chromium	29.0			P
7440-48-4	Cobalt	5.4	J		P
7440-50-8	Copper	33.3		E	P
7439-89-6	Iron	20200			P
7439-92-1	Lead	238			P
7439-95-4	Magnesium	1300			P
7439-96-5	Manganese	234			P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	26.2			P
7440-09-7	Potassium	405	J	E	P
7782-49-2	Selenium	7.8	U	N	P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	127	J		P
7440-28-0	Thallium	5.6	U		P
7440-62-2	Vanadium	18.2			P
7440-66-6	Zinc	222			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC2

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-01
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 78.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	14.8	U	N	P
7440-38-2	Arsenic	7.3			P
7440-39-3	Barium	94.5			P
7440-41-7	Beryllium	0.58	J		P
7440-43-9	Cadmium	1.4			P
7440-70-2	Calcium	15000			P
7440-47-3	Chromium	12.1			P
7440-48-4	Cobalt	3.0	J		P
7440-50-8	Copper	34.5		E	P
7439-89-6	Iron	13800			P
7439-92-1	Lead	124			P
7439-95-4	Magnesium	2480			P
7439-96-5	Manganese	234			P
7439-97-6	Mercury	1.0			CV
7440-02-0	Nickel	7.3	J		P
7440-09-7	Potassium	673	J	E	P
7782-49-2	Selenium	8.6	U	N	P
7440-22-4	Silver	2.5	U		P
7440-23-5	Sodium	69.9	J		P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	18.1			P
7440-66-6	Zinc	126			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC3

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-02
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1950			P
7440-36-0	Antimony	12.8	U	N	P
7440-38-2	Arsenic	5.4			P
7440-39-3	Barium	28.4	J		P
7440-41-7	Beryllium	0.34	J		P
7440-43-9	Cadmium	1.4			P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	5.3			P
7440-48-4	Cobalt	2.0	J		P
7440-50-8	Copper	14.7		E	P
7439-89-6	Iron	6830			P
7439-92-1	Lead	28.7			P
7439-95-4	Magnesium	3020			P
7439-96-5	Manganese	145			P
7439-97-6	Mercury	0.080	J		CV
7440-02-0	Nickel	4.1	J		P
7440-09-7	Potassium	180	J	E	P
7782-49-2	Selenium	7.4	U	N	P
7440-22-4	Silver	2.1	U		P
7440-23-5	Sodium	47.9	J		P
7440-28-0	Thallium	5.3	U		P
7440-62-2	Vanadium	14.1			P
7440-66-6	Zinc	58.7			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC4

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-03
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4630			P
7440-36-0	Antimony	11.8	U	N	P
7440-38-2	Arsenic	7.2			P
7440-39-3	Barium	84.7			P
7440-41-7	Beryllium	0.40	J		P
7440-43-9	Cadmium	3.3			P
7440-70-2	Calcium	21600			P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	3.0	J		P
7440-50-8	Copper	15.3		E	P
7439-89-6	Iron	10500			P
7439-92-1	Lead	82.8			P
7439-95-4	Magnesium	2680			P
7439-96-5	Manganese	213			P
7439-97-6	Mercury	0.098	J		CV
7440-02-0	Nickel	6.0	J		P
7440-09-7	Potassium	577	J	E	P
7782-49-2	Selenium	6.9	U	N	P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	58.6	J		P
7440-28-0	Thallium	4.9	U		P
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	100			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC5

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-04
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 69.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4800			P
7440-36-0	Antimony	17.1	U	N	P
7440-38-2	Arsenic	26.2			P
7440-39-3	Barium	103			P
7440-41-7	Beryllium	1.0	J		P
7440-43-9	Cadmium	1.6			P
7440-70-2	Calcium	11500			P
7440-47-3	Chromium	9.9			P
7440-48-4	Cobalt	4.3	J		P
7440-50-8	Copper	35.9		E	P
7439-89-6	Iron	16900			P
7439-92-1	Lead	95.8			P
7439-95-4	Magnesium	1970			P
7439-96-5	Manganese	288			P
7439-97-6	Mercury	0.16			CV
7440-02-0	Nickel	10.6	J		P
7440-09-7	Potassium	677	J	E	P
7782-49-2	Selenium	10.0	U	N	P
7440-22-4	Silver	2.9	U		P
7440-23-5	Sodium	82.8	J		P
7440-28-0	Thallium	7.1	U		P
7440-62-2	Vanadium	15.8			P
7440-66-6	Zinc	137			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC6

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-05
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 70.1
 Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5680			P
7440-36-0	Antimony	16.9	U	N	P
7440-38-2	Arsenic	13.0			P
7440-39-3	Barium	92.4			P
7440-41-7	Beryllium	0.52	J		P
7440-43-9	Cadmium	1.5			P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt	3.8	J		P
7440-50-8	Copper	24.0		E	P
7439-89-6	Iron	15000			P
7439-92-1	Lead	67.9			P
7439-95-4	Magnesium	2390			P
7439-96-5	Manganese	120			P
7439-97-6	Mercury	0.15			CV
7440-02-0	Nickel	8.9	J		P
7440-09-7	Potassium	399	J	E	P
7782-49-2	Selenium	9.9	U	N	P
7440-22-4	Silver	2.8	U		P
7440-23-5	Sodium	104	J		P
7440-28-0	Thallium	7.1	U		P
7440-62-2	Vanadium	18.8			P
7440-66-6	Zinc	81.0			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC7

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-06
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 76.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4240			P
7440-36-0	Antimony	15.6	U	N	P
7440-38-2	Arsenic	24.7			P
7440-39-3	Barium	110			P
7440-41-7	Beryllium	0.44	J		P
7440-43-9	Cadmium	3.3			P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	15.8			P
7440-48-4	Cobalt	6.8	J		P
7440-50-8	Copper	76.5		E	P
7439-89-6	Iron	44200			P
7439-92-1	Lead	143			P
7439-95-4	Magnesium	2920			P
7439-96-5	Manganese	238			P
7439-97-6	Mercury	0.18			CV
7440-02-0	Nickel	18.2			P
7440-09-7	Potassium	357	J	E	P
7782-49-2	Selenium	9.1	U	N	P
7440-22-4	Silver	2.6	U		P
7440-23-5	Sodium	152	J		P
7440-28-0	Thallium	6.5	U		P
7440-62-2	Vanadium	18.3			P
7440-66-6	Zinc	268			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC8

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-07
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 90.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2450			P
7440-36-0	Antimony	12.9	U	N	P
7440-38-2	Arsenic	8.0			P
7440-39-3	Barium	37.3	J		P
7440-41-7	Beryllium	0.23	J		P
7440-43-9	Cadmium	0.97	J		P
7440-70-2	Calcium	11000			P
7440-47-3	Chromium	29.6			P
7440-48-4	Cobalt	1.7	J		P
7440-50-8	Copper	17.3		E	P
7439-89-6	Iron	7420			P
7439-92-1	Lead	30.8			P
7439-95-4	Magnesium	1730			P
7439-96-5	Manganese	77.5			P
7439-97-6	Mercury	0.071	J		CV
7440-02-0	Nickel	4.2	J		P
7440-09-7	Potassium	487	J	E	P
7782-49-2	Selenium	7.5	U	N	P
7440-22-4	Silver	2.2	U		P
7440-23-5	Sodium	50.7	J		P
7440-28-0	Thallium	5.4	U		P
7440-62-2	Vanadium	10.7	J		P
7440-66-6	Zinc	52.9			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments: _____

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MC9

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-08
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 89.1

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6140			P
7440-36-0	Antimony	13.0	U	N	P
7440-38-2	Arsenic	32.9			P
7440-39-3	Barium	147			P
7440-41-7	Beryllium	0.46	J		P
7440-43-9	Cadmium	7.3			P
7440-70-2	Calcium	13900			P
7440-47-3	Chromium	152			P
7440-48-4	Cobalt	5.1	J		P
7440-50-8	Copper	70.5		E	P
7439-89-6	Iron	15700			P
7439-92-1	Lead	137			P
7439-95-4	Magnesium	3930			P
7439-96-5	Manganese	438			P
7439-97-6	Mercury	0.92			CV
7440-02-0	Nickel	17.3			P
7440-09-7	Potassium	779	J	E	P
7782-49-2	Selenium	7.6	U	N	P
7440-22-4	Silver	2.0	J		P
7440-23-5	Sodium	97.7	J		P
7440-28-0	Thallium	5.4	U		P
7440-62-2	Vanadium	17.3			P
7440-66-6	Zinc	829			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MD0

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-09
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 80.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4180			P
7440-36-0	Antimony	14.5	U	N	P
7440-38-2	Arsenic	10.1			P
7440-39-3	Barium	65.2			P
7440-41-7	Beryllium	0.50	J		P
7440-43-9	Cadmium	1.2	J		P
7440-70-2	Calcium	19400			P
7440-47-3	Chromium	11.3			P
7440-48-4	Cobalt	4.2	J		P
7440-50-8	Copper	21.7		E	P
7439-89-6	Iron	13100			P
7439-92-1	Lead	47.7			P
7439-95-4	Magnesium	3580			P
7439-96-5	Manganese	249			P
7439-97-6	Mercury	0.077	J		CV
7440-02-0	Nickel	8.9	J		P
7440-09-7	Potassium	439	J	E	P
7782-49-2	Selenium	8.5	U	N	P
7440-22-4	Silver	0.17	J		P
7440-23-5	Sodium	211	J		P
7440-28-0	Thallium	6.1	U		P
7440-62-2	Vanadium	14.3			P
7440-66-6	Zinc	85.9			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments: _____

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MD1

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Matrix (soil/water): SOIL Lab Sample ID: 030764-10
 Level (low/med): LOW Date Received: 6/18/2003
 % Solids: 79.6
 Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3390			P
7440-36-0	Antimony	15.1	U	N	P
7440-38-2	Arsenic	11.7			P
7440-39-3	Barium	67.8			P
7440-41-7	Beryllium	0.32	J		P
7440-43-9	Cadmium	0.70	J		P
7440-70-2	Calcium	16600			P
7440-47-3	Chromium	7.6			P
7440-48-4	Cobalt	2.5	J		P
7440-50-8	Copper	11.4		E	P
7439-89-6	Iron	9950			P
7439-92-1	Lead	39.9			P
7439-95-4	Magnesium	2340			P
7439-96-5	Manganese	198			P
7439-97-6	Mercury	0.089	J		CV
7440-02-0	Nickel	4.8	J		P
7440-09-7	Potassium	430	J	E	P
7782-49-2	Selenium	8.8	U	N	P
7440-22-4	Silver	2.5	U		P
7440-23-5	Sodium	61.8	J		P
7440-28-0	Thallium	6.3	U		P
7440-62-2	Vanadium	10.8	J		P
7440-66-6	Zinc	48.0			P

Color Before: brown Clarity Before: n/a Texture: medium
 Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME1MD2

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Lab Sample ID: 030764-11
Level (low/med): LOW Date Received: 6/18/2003
% Solids: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3200			P
7440-36-0	Antimony	15.1	U	N	P
7440-38-2	Arsenic	12.0			P
7440-39-3	Barium	87.3			P
7440-41-7	Beryllium	0.28	J		P
7440-43-9	Cadmium	0.97	J		P
7440-70-2	Calcium	37700			P
7440-47-3	Chromium	8.7			P
7440-48-4	Cobalt	2.7	J		P
7440-50-8	Copper	14.3		E	P
7439-89-6	Iron	12800			P
7439-92-1	Lead	47.4			P
7439-95-4	Magnesium	3360			P
7439-96-5	Manganese	307			P
7439-97-6	Mercury	0.076	J		CV
7440-02-0	Nickel	5.1	J		P
7440-09-7	Potassium	321	J	E	P
7782-49-2	Selenium	8.8	U	N	P
7440-22-4	Silver	2.5	U		P
7440-23-5	Sodium	81.0	J		P
7440-28-0	Thallium	6.3	U		P
7440-62-2	Vanadium	10.3	J		P
7440-66-6	Zinc	62.3			P

Color Before: brown Clarity Before: n/a Texture: medium
Color After: yellow Clarity After: n/a Artifacts: _____

Comments:

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	200.0	U	200.0	U	200.0	U	200.0	U	40.000	U	P
Antimony	60.0	U	60.0	U	60.0	U	60.0	U	-0.240	J	P
Arsenic	15.0	U	15.0	U	15.0	U	15.0	U	3.000	U	P
Barium	200.0	U	1.7	J	1.8	J	200.0	U	40.000	U	P
Beryllium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cadmium	5.0	U	5.0	U	5.0	U	0.2	J	1.000	U	P
Calcium	5000.0	U	5000.0	U	5000.0	U	5000.0	U	11.318	J	P
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Cobalt	0.5	J	0.6	J	50.0	U	0.5	J	10.000	U	P
Copper	25.0	U	1.4	J	5.8	J	2.5	J	5.000	U	P
Iron	100.0	U	9.5	J	100.0	U	13.9	J	20.000	U	P
Lead	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Magnesium	5000.0	U	51.0	J	43.0	J	61.3	J	9.876	J	P
Manganese	0.7	J	1.0	J	0.7	J	0.7	J	0.392	J	P
Nickel	40.0	U	40.0	U	40.0	U	40.0	U	8.000	U	P
Potassium	5000.0	U	5000.0	U	5000.0	U	5000.0	U	9.221	J	P
Selenium	35.0	U	35.0	U	35.0	U	35.0	U	7.000	U	P
Silver	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Sodium	20.4	J	23.0	J	5000.0	U	5000.0	U	20.029	J	P
Thallium	25.0	U	25.0	U	25.0	U	25.0	U	0.627	J	P
Vanadium	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Zinc	60.0	U	60.0	U	60.0	U	60.0	U	12.000	U	P

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum			200.0	U	23.8	J					P
Antimony			60.0	U	60.0	U					P
Arsenic			15.0	U	15.0	U					P
Barium			200.0	U	200.0	U					P
Beryllium			0.2	J	0.2	J					P
Cadmium			5.0	U	5.0	U					P
Calcium			5000.0	U	5000.0	U					P
Chromium			10.0	U	10.0	U					P
Cobalt			0.5	J	50.0	U					P
Iron			100.0	U	15.9	J					P
Copper			10.0	U	10.0	U					P
Magnesium			26.0	J	63.0	J					P
Manganese			0.7	J	15.0	U					P
Nickel			40.0	U	40.0	U					P
Potassium			5000.0	U	5000.0	U					P
Selenium			35.0	U	35.0	U					P
Silver			10.0	U	10.0	U					P
Sodium			5000.0	U	5000.0	U					P
Thallium			25.0	U	25.0	U					P
Vanadium			50.0	U	50.0	U					P
Zinc			60.0	U	60.0	U					P

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calibration Blank(ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.200	U	0.200	U	0.200	U	0.200	U	0.100	U	CV

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	
Mercury			0.200	U							CV

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Antimony	60.0	U	60.0	U	60.0	U	60.0	U			P
Copper	25.0	U	25.0	U	25.0	U	0.8	J			P
Selenium	-6.7	J	35.0	U	35.0	U	35.0	U			P

USEPA-CLP

3-IN
BLANKSLab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Antimony			60.0	U							P
Copper			25.0	U							P
Selenium			35.0	U							P

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: CEIMIC Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0

ICP-AES Instrument ID: PE Optima ICP ICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700	245175.00	101	246368.30	102	39975.41	99	241563.50	100
Antimony	0	568	-16.25		573.64	101	-18.06		558.13	98
Arsenic	0	94	-5.24		89.22	95	-3.32		88.07	94
Barium	0	503	2.57		508.31	101	1.48		505.36	100
Beryllium	0	467	-0.04		501.73	107	0.03		501.56	107
Cadmium	0	936	3.20		977.82	104	3.39		990.93	106
Calcium	233100	232200	240717.80	103	245251.41	106	36222.91	101	231165.50	100
Chromium	37	485	36.63	99	509.98	105	36.04	97	508.48	105
Cobalt	0	463	2.94		483.91	105	2.95		480.07	104
Copper	0	511	4.79		506.19	99	8.53		506.36	99
Iron	93880	93680	96264.80	103	96280.60	103	94263.17	100	94931.63	101
Lead	0	52	-7.65		40.67	78	-8.77		37.71	73
Magnesium	247700	246400	244587.41	99	244619.00	99	39936.30	97	243063.30	99
Manganese	0	486	25.61		516.10	106	25.74		515.36	106
Nickel	0	912	7.51		916.15	100	7.04		917.16	101
Potassium	0		78.61		39.68		14.35		46.86	
Selenium	0	47	-0.63		42.12	90	-4.23		43.66	93
Silver	0	203	0.27		202.03	100	0.39		201.14	99
Sodium	0		630.28		634.35		633.97		635.15	
Thallium	0	92	-18.27		81.65	89	-14.55		85.28	93
Vanadium	0	471	11.51		492.77	105	10.48		489.08	104
Zinc	0	975	43.10		980.01	101	41.51		971.47	100

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB0ICP-AES Instrument ID: PE Optima ICP ICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700					40659.00	100	241893.50	100
Antimony	0	568					-15.74		554.90	98
Arsenic	0	94					-1.03		82.78	88
Barium	0	503					1.40		500.02	99
Beryllium	0	467					0.14		500.05	107
Cadmium	0	936					3.58		992.76	106
Calcium	233100	232200					34460.80	101	239866.80	103
Chromium	37	485					35.94	97	506.26	104
Cobalt	0	463					2.85		477.93	103
Copper	93880	93680					94814.10	101	94926.02	101
Lead	0	52					-8.94		40.35	78
Magnesium	247700	246400					40621.59	97	241557.50	98
Manganese	0	486					25.39		511.49	105
Nickel	0	912					7.09		908.95	100
Potassium	0						21.74		47.31	
Selenium	0	47					0.00		43.32	92
Silver	0	203					0.41		200.51	99
Sodium	0						638.21		625.39	
Thallium	0	92					-14.48		77.91	85
Vanadium	0	471					10.83		485.38	103
Zinc	0	975					41.26		952.56	98

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0ICP-AES Instrument ID: PE Optima ICP ICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700	247164.70	102	248243.80	103	42903.09	100	242999.09	101
Antimony	0	568	-20.12		570.50	100	-17.08		531.93	94
Calcium	233100	232200	252881.41	108	253389.41	109	49751.70	107	251470.50	108
Copper	0	511	4.40		513.78	101	4.44		499.70	98
Iron	93880	93680	99450.84	106	99550.02	106	96904.23	103	96792.39	103
Magnesium	247700	246400	254099.30	103	254279.91	103	47221.00	100	247197.80	100
Selenium	0	47	16.41		53.67	114	2.34		46.57	99

USEPA-CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

I. Name: Ceimic Corporation Contract: 68-W-02-063Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0ICP-AES Instrument ID: PE Optima ICP ICS Source: PARTA(1002)/B(0596)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol.A	Sol AB	Sol.A	%R	Sol AB	%R	Sol.A	%R	Sol.AB	%R
Aluminum	241700	241700					40692.41	100	241425.70	100
Antimony	0	568					-18.25		532.87	94
Calcium	233100	232200					49513.91	107	249239.00	107
Copper	0	511					3.27		497.96	97
Iron	93880	93680					96341.72	103	96174.61	103
Magnesium	247700	246400					46328.09	99	245818.70	100
Selenium	0	47					2.84		48.21	103

USEPA-CLP

5A-IN

MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME1MD2S

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG NO.: ME1MB0Matrix (soil/water): SOILLevel (low/med): LOW% Solids for Sample: 78.6

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		4136.7139		3195.1230		0.00	0		NR
Antimony	75 - 125	5.8528	J	15.1160	U	25.19	23	N	P
Arsenic	75 - 125	22.3537		11.9504		10.08	103		P
Barium	75 - 125	601.3095		87.3185		503.87	102		P
Beryllium	75 - 125	12.8239		0.2841	J	12.60	100		P
Cadmium	75 - 125	13.9595		0.9751	J	12.60	103		P
Calcium		41368.8008		37708.8789		0.00	0		NR
Chromium	75 - 125	57.3734		8.6902		50.39	97		P
Cobalt	75 - 125	131.1313		2.6639	J	125.97	102		P
Copper	75 - 125	78.0849		14.2824		62.98	101		P
Iron		13790.6602		12814.0098		0.00	0		NR
Lead		54.3366		47.3868		5.04	138		P
Magnesium		3316.0359		3357.6951		0.00	0		NR
Manganese	75 - 125	448.2223		307.1710		125.97	112		P
Mercury	75 - 125	0.7248		0.0765	J	0.64	101		CV
Nickel	75 - 125	133.1340		5.0851	J	125.97	102		P
Potassium		388.7097	J	321.4809	J	0.00	0		NR
Selenium	75 - 125	8.8177	U	8.8177	U	12.60	0	N	P
Silver	75 - 125	11.4800		0.0716	J	12.60	91		P
Sodium		81.7808	J	81.0398	J	0.00	0		NR
Thallium	75 - 125	9.7167		6.2983	U	12.60	77		P
Vanadium	75 - 125	134.3795		10.3240	J	125.97	98		P
Zinc	75 - 125	182.2689		62.3443		125.97	95		P

Comments:

USEPA-CLP

5B-IN

POST-DIGESTION SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME1MD2A

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
Matrix (soil/water): SOIL Level (low/med): LOW
Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Antimony		102.60	60.00	120.0	86		P
Selenium		21.79	35.00	70.0	31		P

Comments:

USEPA-CLP

6-IN

DUPLICATES

EPA SAMPLE NO.

ME1MD2D

Lab Name: CEIMIC CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG

ME1MB0

NO.:

Matrix (soil/water): SOILLevel (low/med): LOW% Solids for Sample: 78.6% Solids for Duplicate: 78.3

Concentration Units: (ug/L or mg/kg dry weight):

MG/KG

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		3195.1230	3318.1399	4		P
Antimony		15.1160 U	15.1160 U			P
Arsenic	3.7790	11.9504	12.9766	8		P
Barium	50.3867	87.3185	104.4083	18		P
Beryllium		0.2841 J	0.3067 J	8		P
Cadmium		0.9751 J	1.0294 J	5		P
Calcium		37708.8789	40333.6992	7		P
Chromium	2.5193	8.6902	6.7215	26		P
Cobalt		2.6639 J	2.9897 J	12		P
Copper	6.2983	14.2824	14.7775	3		P
Lead		12814.0098	14810.2803	14		P
Lead		47.3868	54.9873	15		P
Magnesium	1259.6680	3357.6951	4175.9429	22		P
Manganese		307.1710	312.5703	2		P
Mercury		0.0765 J	0.0871 J	13		CV
Nickel		5.0851 J	6.0539 J	17		P
Potassium		321.4809 J	362.6631 J	12		P
Selenium		8.8177 U	8.8177 U			P
Silver		2.5193 U	0.1740 J	200		P
Sodium		81.0398 J	77.9913 J	4		P
Thallium		6.2983 U	6.2983 U			P
Vanadium		10.3240 J	10.8960 J	5		P
Zinc	15.1160	62.3443	62.0014	1		P

7 - IN
LABORATORY CONTROL SAMPLE

LABORATORY CONTROL SAMPLE

7 - IN
LABORATORY CONTROL SAMPLE

7 - IN

LABORATORY CONTROL SAMPLE

Lab Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No: _____ SDG NO.: ME1MB0
Solid LCS Source: LCS-S(0996)
Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Mercury				12.3	13.4		7.8	16.9	109

8-IN

ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

ME1MC5L

Lab Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852NRAS No.: SDG NO.: ME1MB0Matrix (soil/water): SOILLevel (low/med): LOWConcentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
Aluminum	16809.22		17595.09		5		P
Antimony	60.00	U	300.00	U			P
Arsenic	91.66		88.75		3		P
Barium	359.81		363.62	J	1		P
Beryllium	3.57	J	3.79	J	6		P
Cadmium	5.64		6.17	J	9		P
Calcium	40380.51		42428.73		5		P
Chromium	34.58		33.48	J	3		P
Cobalt	14.96	J	16.35	J	9		P
Copper	125.88		144.70		15	E	P
Iron	59109.80		62403.05		6		P
Lead	335.92		345.55		3		P
Magnesium	6907.57		7556.89	J	9		P
Manganese	1009.49		1051.17		4		P
Nickel	37.22	J	38.11	J	2		P
Potassium	2373.01	J	3432.51	J	45	E	P
Selenium	35.00	U	175.00	U			P
Silver	10.00	U	50.00	U			P
Sodium	290.27	J	25000.00	U	100		P
Thallium	25.00	U	125.00	U			P
Vanadium	55.55		56.21	J	1		P
Zinc	478.98		497.26		4		P

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852NRAS No.: SDG NO.: ME1MB0Instrument Type: CVInstrument ID: FIMS CVAADate: 1/27/2003Preparation Method: CS1Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.2	0.03

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

I Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB0

Instrument Type: CV Instrument ID: FIMS CVAA Date: 1/27/2003

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.10	0.04

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Name: Ceimic Corporation Contract: 68-W-02-063
Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG NO.: ME1MB0
Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003
Preparation Method: NP1
Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	200	23.51
Antimony	206.83	60	2.90
Arsenic	188.98	15	4.46
Barium	233.53	200	1.04
Beryllium	313.11	5	0.14
Cadmium	226.50	5	0.20
Calcium	315.89	5000	35.71
Chromium	267.72	10	0.66
Cobalt	228.62	50	0.45
Copper	324.75	25	0.67
Iron	273.96	100	9.44
Lead	220.35	10	1.48
Magnesium	279.08	5000	14.72
Manganese	257.61	15	0.68
Nickel	231.60	40	1.05
Potassium	766.49	5000	49.93
Selenium	196.03	35	6.04
Silver	338.29	10	0.66
Sodium	589.59	5000	19.93
Thallium	190.80	25	7.88
Vanadium	290.88	50	1.22
Zinc	206.20	60	1.26

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003
 Preparation Method: HS1
 Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	40.00	4.67
Antimony	206.83	12.00	0.22
Arsenic	188.98	3.00	0.46
Barium	233.53	40.00	0.51
Beryllium	313.11	1.00	0.04
Cadmium	226.50	1.00	0.03
Calcium	315.89	1000.00	3.00
Chromium	267.72	2.00	0.28
Cobalt	228.62	10.00	0.15
Copper	324.75	5.00	0.29
Iron	273.96	20.00	9.99
Lead	220.35	2.00	0.16
Magnesium	279.08	1000.00	6.43
Manganese	257.61	3.00	0.06
Nickel	231.60	8.00	0.13
Potassium	766.49	1000.00	7.36
Selenium	196.03	7.00	0.67
Silver	338.29	2.00	0.09
Sodium	589.59	1000.00	2.92
Thallium	190.80	5.00	0.28
Vanadium	290.88	10.00	0.19
Zinc	206.20	12.00	1.52

USEPA-CLP

9-IN

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Instrument Type: P Instrument ID: PE Optima ICP Date: 2/26/2003
 Preparation Method: HS1
 Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	200	98.83
Antimony	206.83	60	5.60
Arsenic	188.98	15	6.94
Barium	233.53	200	12.03
Beryllium	313.11	5	0.28
Cadmium	226.50	5	0.31
Calcium	315.89	5000	39.12
Chromium	267.72	10	0.63
Cobalt	228.62	50	1.03
Copper	324.75	25	2.96
Iron	273.96	100	34.29
Lead	220.35	10	3.45
Magnesium	279.08	5000	11.80
Manganese	257.61	15	3.10
Nickel	231.60	40	2.61
Potassium	766.49	5000	114.52
Selenium	196.03	35	6.73
Silver	338.29	10	0.58
Sodium	589.59	5000	117.00
Thallium	190.80	25	7.44
Vanadium	290.88	50	1.94
Zinc	206.20	60	26.68

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBS01	6/19/2003	0.20	100
LCSS01	6/19/2003	0.05	100
ME1MC2	6/19/2003	0.20	100
ME1MC3	6/19/2003	0.20	100
ME1MC4	6/19/2003	0.20	100
ME1MC5	6/19/2003	0.20	100
ME1MC6	6/19/2003	0.20	100
ME1MC7	6/19/2003	0.21	100
ME1MC8	6/19/2003	0.21	100
ME1MC9	6/19/2003	0.20	100
ME1MD0	6/19/2003	0.20	100
ME1MD1	6/19/2003	0.20	100
ME1MD2	6/19/2003	0.20	100
ME1MD2S	6/19/2003	0.20	100
ME1MD2D	6/19/2003	0.20	100
ME1MB0	6/19/2003	0.21	100
ME1MB1	6/19/2003	0.21	100
ME1MB2	6/19/2003	0.20	100
ME1MB3	6/19/2003	0.20	100
ME1MB4	6/19/2003	0.21	100
ME1MB5	6/19/2003	0.20	100
ME1MB6	6/19/2003	0.20	100
ME1MB7	6/19/2003	0.21	100
ME1MB8	6/19/2003	0.20	100

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Preparation Method: HS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBS01	6/20/2003	1.00	200
LCSS01	6/20/2003	1.00	200
ME1MC2	6/20/2003	1.04	200
ME1MC3	6/20/2003	1.05	200
ME1MC4	6/20/2003	1.10	200
ME1MC5	6/20/2003	1.01	200
ME1MC6	6/20/2003	1.01	200
ME1MC7	6/20/2003	1.01	200
ME1MC8	6/20/2003	1.03	200
ME1MC9	6/20/2003	1.04	200
ME1MD0	6/20/2003	1.02	200
ME1MD1	6/20/2003	1.00	200
ME1MD2	6/20/2003	1.01	200
ME1MD2D	6/20/2003	1.01	200
ME1MD2S	6/20/2003	1.01	200
ME1MB0	6/20/2003	1.12	200
ME1MB1	6/20/2003	1.10	200
ME1MB2	6/20/2003	1.07	200
ME1MB3	6/20/2003	1.00	200
ME1MB4	6/20/2003	1.16	200
ME1MB5	6/20/2003	1.08	200
ME1MB6	6/20/2003	1.05	200
ME1MB7	6/20/2003	1.05	200
ME1MB8	6/20/2003	1.03	200

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Seimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
S0	6/19/2003		100
S0.2	6/19/2003		100
S0.5	6/19/2003		100
S1.0	6/19/2003		100
S5.0	6/19/2003		100
S10.0	6/19/2003		100
ICV01	6/19/2003		100
ICB01	6/19/2003		100
CRI01	6/19/2003		100
CCV01	6/19/2003		100
CCB01	6/19/2003		100
CCV02	6/19/2003		100
CCB02	6/19/2003		100
CRI02	6/19/2003		100
CCV03	6/19/2003		100
CCB03	6/19/2003		100
CRI03	6/19/2003		100
CCV04	6/19/2003		100
CCB04	6/19/2003		100

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Preparation Method: NP1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
S0	7/6/2003		100
S	7/6/2003		100
ICV01	7/6/2003		100
ICB01	7/6/2003		100
CRI01	7/6/2003		100
ICSA01	7/6/2003		100
ICSAB01	7/6/2003		100
CCV01	7/6/2003		100
CCB01	7/6/2003		100
CCV02	7/6/2003		100
CCB02	7/6/2003		100
CRI02	7/6/2003		100
ICSA02	7/6/2003		100
ICSAB02	7/6/2003		100
CCV03	7/6/2003		100
CCB03	7/6/2003		100
CCV04	7/6/2003		100
CCB04	7/6/2003		100
CRI03	7/6/2003		100
ICSA03	7/6/2003		100
ICSAB03	7/6/2003		100
CCV05	7/6/2003		100
CCB05	7/6/2003		100

Comments: _____

USEPA-CLP
12-IN
PREPARATION LOG

Lab Name: Ceimic Corporation Contract: 68-W-02-063
 Lab Code: CEIMIC Case No.: 31852 NRAS No.: _____ SDG NO.: ME1MB0
 Preparation Method: NP1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
S0	7/7/2003		100
S	7/7/2003		100
ICV11	7/7/2003		100
ICB11	7/7/2003		100
CRI11	7/7/2003		100
ICSA11	7/7/2003		100
ICSAB11	7/7/2003		100
CCV11	7/7/2003		100
CCB11	7/7/2003		100
CCV12	7/7/2003		100
CCB12	7/7/2003		100
CRI12	7/7/2003		100
ICSA12	7/7/2003		100
ICSAB12	7/7/2003		100
CCV13	7/7/2003		100
CCB13	7/7/2003		100
CRI13	7/7/2003		100
ICSA13	7/7/2003		100
ICSAB13	7/7/2003		100
CCV14	7/7/2003		100
CCB14	7/7/2003		100

Comments: _____

USEPA-CLP

13-IN

ANALYSIS RUN LOG

Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852NRAS No.: SDG No.: ME1MB0Instrument ID: PE Optima ICPAnalysis Method: PStart Date: 7/6/2003End Date: 7/6/2003

EPA Sample NO.	D/F	Time	Analytes																							
			A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V	Z	C N
S0	1.0	1059	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S	1.0	1106	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV01	1.0	1112	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB01	1.0	1119	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI01	1.0	1126	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA01	1.0	1133	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB01	1.0	1140	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV01	1.0	1147	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB01	1.0	1154	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PBS01	1.0	1201	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1.0	1208																								
ICSS01	1.0	1215	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZ	1.0	1222																								
ME1MC2	1.0	1229	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC3	1.0	1236	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC4	1.0	1242	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC5	1.0	1249	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC5L	5.0	1256	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1.0	1303																								
CCV02	1.0	1310	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB02	1.0	1316	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC6	1.0	1324	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC7	1.0	1330	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC8	1.0	1337	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MC9	1.0	1344	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MD0	1.0	1351	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MD1	1.0	1357	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1.0	1404																								
CRI02	1.0	1411	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA02	1.0	1419	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB02	1.0	1425	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV03	1.0	1432	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
303	1.0	1439	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ME1MD2	1.0	1446	X		X	X	X	X	X	X	X		X	X	X	X		X	X		X	X	X	X	X	X
ME1MD2D	1.0	1452	X		X	X	X	X	X	X	X		X	X	X	X		X	X		X	X	X	X	X	X

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13-IN

ANALYSIS RUN LOG

Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852NRAS No.: SDG No.: ME1MB0Instrument ID: PE Optima ICPAnalysis Method: PStart Date: 7/6/2003End Date: 7/6/2003

EPA Sample NO.	D/F	Time	Analytes																	
			A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G
ME1MD2S	1.0	1459	X		X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB0	1.0	1506	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB1	1.0	1512	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB2	1.0	1519	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB3	1.0	1525	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB4	1.0	1532	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB5	1.0	1539	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ZZZZZZ	1.0	1545																		
CCV04	1.0	1552	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
CCB04	1.0	1559	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB6	1.0	1606	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB7	1.0	1613	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ME1MB8	1.0	1619	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ZZZZZZ	1.0	1626																		
ZZZZZZ	1.0	1633																		
ZZZZZZ	1.0	1640																		
ZZZZZZ	1.0	1647																		
CRI03	1.0	1653	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ICSA03	1.0	1700	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
ICSAB03	1.0	1707	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
CCV05	1.0	1714	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
CCB05	1.0	1720	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X

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13-IN

ANALYSIS RUN LOG

Name: Ceimic Corporation Contract: 68-W-02-063

Lab Code: CEIMIC Case No.: 31852 NRAS No.: SDG No.: ME1MB0

Instrument ID: PE Optima ICP Analysis Method: P

Start Date: 7/7/2003 End Date: 7/8/2003

EPA Sample NO.	D/F	Time	Analytes																									
			A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	2211		X							X								X									
S	1.0	2219		X							X								X									
ICV11	1.0	2225		X							X								X									
ICB11	1.0	2232		X							X								X									
CR11	1.0	2239		X							X								X									
ICSA11	1.0	2246	X	X					X		X	X		X					X									
ICSAB11	1.0	2253	X	X					X		X	X		X					X									
CCV11	1.0	2300		X							X								X									
CCB11	1.0	2306		X							X								X									
ME1MD2	1.0	2313		X							X								X									
ME1MD2D	1.0	2320		X							X								X									
ME1MD2S	1.0	2326		X							X								X									
ME1MB0	1.0	2333									X																	
ME1MB1	1.0	2339									X																	
ME1MB2	1.0	2346									X																	
ME1MB3	1.0	2352									X																	
ME1MB4	1.0	2359									X																	
ME1MB5	1.0	0006									X																	
ZZZZZZ	1.0	0012																										
CCV12	1.0	0019		X							X								X									
CCB12	1.0	0026		X							X								X									
ME1MB6	1.0	0033									X																	
ME1MB7	1.0	0040									X																	
ME1MB8	1.0	0046									X																	
ZZZZZZ	1.0	0053																										
ZZZZZZ	1.0	0100																										
ZZZZZZ	5.0	0107																										
ZZZZZZ	1.0	0114																										
CR12	1.0	0121		X							X								X									
ICSA12	1.0	0126	X	X					X		X	X		X					X									
ICSAB12	1.0	0135	X	X					X		X	X		X					X									
CCV13	1.0	0141		X							X								X									
313	1.0	0148		X							X								X									
ZZZZZZ	1.0	0155																										
ZZZZZZ	1.0	0202																										

USEPA-CLP

13-IN

ANALYSIS RUN LOG

Name: Ceimic CorporationContract: 68-W-02-063Lab Code: CEIMICCase No.: 31852

NRAS No.: _____

SDG No.: ME1MB0Instrument ID: PE Optima ICPAnalysis Method: PStart Date: 7/7/2003End Date: 7/8/2003

EPA Sample NO.	D/F	Time	Analytes																					
			A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V
ZZZZZZ	1.0	0208																						
ZZZZZZ	1.0	0215																						
ME1MD2A	1.0	0221		X																X				
ZZZZZZ	1.0	0228																						
ZZZZZZ	1.0	0234																						
CRI13	1.0	0242		X								X								X				
ICSA13	1.0	0248	X	X					X			X	X		X					X				
ICSAB13	1.0	0255	X	X					X			X	X		X					X				
CCV14	1.0	0302		X								X								X				
CCB14	1.0	0308		X								X								X				

APPENDIX C

4 Mile Radius Map

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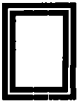
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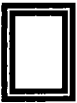
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APPENDIX C: 4 MILE RADIUS MAP



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Sensitive Environment Information



Indiana Department of Natural Resources

Frank O'Bannon, Governor
Larry D. Macklin, Director
Division of Nature Preserves
402 W. Washington Street, Rm. W267
Indianapolis, IN 46204-2739

March 25, 2002

Mr. Dan Chesterson
IDEM/OLQ Brownfields Program
100 N. Senate Avenue
PO Box 6015
Indianapolis, IN 46206-6015

Dear Mr. Chesterson:

I am responding to your request for information on the endangered, threatened, or rare (ETR) species, high quality natural communities, and natural areas documented from a brownfields project area, Lasalle Park, South Bend, Indiana. The Indiana Natural Heritage Data Center has been checked and following you will find information on the ETR species and significant areas documented from the project area.

1. There is a historical record from 1929 of the state threatened plant *Lathyrus venosus*, smooth veiny pea, documented in Section 3, Township 37 North, Range 2 East.

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. You should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

At some point, you may need to contact the Department of Natural Resources' Environmental Review Coordinator so that other divisions within the department have the opportunity to review your proposal. For more information, please contact:

Larry Macklin, Director
Department of Natural Resources
attn: Stephen H. Jose
Environmental Coordinator
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204
(317)232-4080

RECEIVED

MAR 26 2002

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

Dan Chesterson

3

March 25, 2002

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)232-8059 if you have any questions or need additional information.

Sincerely,

Ronald P. Hellmich

Ronald P. Hellmich

Indiana Natural Heritage Data Center

15 Mile Surface Water Pathway Map

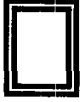
SDMS US EPA Region V

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Document ID:

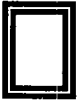
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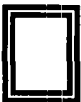


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